

CATALOGUE  
ATEX 2024

ELECTRICAL SYSTEMS

LIGHTING

**Palazzoni**





# Atex

The Company has extensive experience in extreme environments where flammable materials, oxidising chemicals, salt solutions, acids and motor and vegetable oils are handled. Palazzoli is the absolute market leader in Atex products, explosion-proof equipment for high-risk environments. Power plants, chemical industries, oil platforms, military bases and refineries are just a few areas where lighting devices must prevent any propagation of sparks and ensure safe and reliable operation over time.



ATEX

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# Electrical Systems

The Company has consolidated experience in extreme environments, where the presence of oxidising chemicals, saline solutions, acids and motor and vegetable oils has forged the products for which Palazzoli is the absolute market leader.

The IE regulatory system, in particular with the IEC 60079-10 series of standards, which establishes the basic rules for electrical installations in places where there is a danger of explosion due to the presence of both gas and combustible dust, with regard to the classification of hazardous areas, refers to a particular calculation model, called the I IEC zone system.

This model is based on the determination of the probability of the formation of an explosive atmosphere and its persistence over time in the environments, which thus become fundamental parameters for the classification of hazardous areas.



### Danger

### Gases - vapours

### Dusts

Permanent

**ZONE 0**

**ZONE 20**

Occasional

**ZONE 1**

**ZONE 21**

Not likely

**ZONE 2**

**ZONE 22**

# XCEE-EX



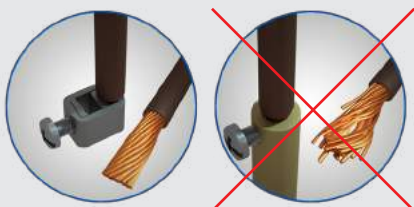




## XCEE-EX Zone 2, 21, 22

Mobile plugs in antistatic technopolymer

### ADVANTAGES



1

Indirect clamping terminals prevent overheating and cable breaks even after 50,000 insertions.

The plug is equipped with an extra external cable clamp with a double lock to ensure maximum resistance against tearing.

2



3

The XCEE-EX casing, made of carbon-fibre-reinforced technopolymer, prevents the build-up of electrostatic charges, thus preventing the ignition of explosive gas, vapour or dust atmospheres.

Plugs come with a range of covers to ensure plug protection even in the most polluted environments.

4





## XCEE-EX Zone 2, 21, 22

Mobile plugs in antistatic technopolymer



Atex execution - Gas	II 3G - Ex ec IIC T6...T4 Gc
Atex execution - Dust	II 2D - Ex tb IIIC T70°C...T95°C Db
Body material	High-thickness antistatic technopolymer
Pin treatment	Nickel plating
Colour	RAL 9005 Jet black
Protection rating	IP66
Additional IP rating	IP66/IP67
Surface resistance	<11 Ω (prevention of electrostatic charge accumulation)
Resistance to abnormal heat and fire	650°C (grip) 960°C (insert)
Ambient operating temperature	See table
Ambient storage temperature	-50°C - +90°C
Rated current	16A - 32A - 63A
Operating voltage	50V - 690V (16A - 32A) 50V - 1000V (63A)
Insulation voltage	690V (16A - 32A) 1000V (63A)
Operating frequency	50-500Hz and DC
Terminal type	Indirect clamping

### Ambient operating temperature

Rated current (A)	Ambient operating temperature (°C)	Temperature class (Gas)	Maximum surface temperature (°C) (Dust)
16	-40 ... +50	T6	T70
	-40 ... +65	T5	T85
32	-40 ... +40	T5	T70
	-40 ... +60	T4	T90
63	-40 ... +40	T5	T80
	-40 ... +55	T4	T95



### DIRECTIVES

2014/34/EU (ATEX)  
2011/65/EU (RoHS)  
2012/19/EU (WEEE)

### PRODUCT STANDARDS

IEC/EN 60079  
IEC/EN 60079-7  
IEC/EN 60079-31  
IEC/EN 60309-1  
IEC/EN 60309-2  
IEC/EN 63000

Technical data sheets updated to new standards on [palazzoli.com](http://palazzoli.com) website



## XCEE-EX Zone 2, 21, 22

Mobile plugs in antistatic technopolymer



High-performance straight mobile plugs  
50/60Hz IP66/IP67

Rated current (A)	Rated voltage (V)	Voltage colour	Poles	h ref.	Palazzoli code	Pack Qty
16	110	Yellow	2P+ ⚡	4	<b>760124EX</b>	1
	110	Yellow	3P+ ⚡	4	<b>760134EX</b>	1
	110	Yellow	3P+N+ ⚡	4	<b>760144EX</b>	1
	230	Blue	2P+ ⚡	6	<b>760126EX</b>	1
	230	Blue	3P+ ⚡	9	<b>760139EX</b>	1
	230	Blue	3P+N+ ⚡	9	<b>760149EX</b>	1
	400	Red	2P+ ⚡	9	<b>760129EX</b>	1
	400	Red	3P+ ⚡	6	<b>760136EX</b>	1
	400	Red	3P+N+ ⚡	6	<b>760146EX</b>	1
	500	Black	3P+ ⚡	7	<b>760137EX</b>	1
	500	Black	3P+N+ ⚡	7	<b>760147EX</b>	1
	32	110	Yellow	2P+ ⚡	4	<b>760224EX</b>
110		Yellow	3P+ ⚡	4	<b>760234EX</b>	1
110		Yellow	3P+N+ ⚡	4	<b>760244EX</b>	1
230		Blue	2P+ ⚡	6	<b>760226EX</b>	1
230		Blue	3P+ ⚡	9	<b>760239EX</b>	1
230		Blue	3P+N+ ⚡	9	<b>760249EX</b>	1
400		Red	2P+ ⚡	9	<b>760229EX</b>	1
400		Red	3P+ ⚡	6	<b>760236EX</b>	1
400		Red	3P+N+ ⚡	6	<b>760246EX</b>	1
500		Black	3P+ ⚡	7	<b>760237EX</b>	1
500		Black	3P+N+ ⚡	7	<b>760247EX</b>	1
63		110	Yellow	2P+ ⚡	4	<b>760324EX</b>
	110	Yellow	3P+ ⚡	4	<b>760334EX</b>	1
	110	Yellow	3P+N+ ⚡	4	<b>760344EX</b>	1
	230	Blue	2P+ ⚡	6	<b>760326EX</b>	1
	230	Blue	3P+ ⚡	9	<b>760339EX</b>	1
	230	Blue	3P+N+ ⚡	9	<b>760349EX</b>	1
	400	Red	2P+ ⚡	9	<b>760329EX</b>	1
	400	Red	3P+ ⚡	6	<b>760336EX</b>	1
	400	Red	3P+N+ ⚡	6	<b>760346EX</b>	1
	500	Black	3P+ ⚡	7	<b>760337EX</b>	1
	500	Black	3P+N+ ⚡	7	<b>760347EX</b>	1

### Cable features

Rated current (A)	Poles	Entry cable diameter (mm)	Cable cross-section range (mm <sup>2</sup> )
16	2P+ ⚡	7 - 15	1 - 10
	3P+ ⚡		
	3P+N+ ⚡	9 - 19	
32	2P+ ⚡	9 - 19	1 - 10
	3P+ ⚡		
	3P+N+ ⚡	13 - 21	
63	2P+ ⚡	14 - 35	6 - 25
	3P+ ⚡		
	3P+N+ ⚡		



Watertight caps for plugs  
IP67

Rated current (A)	Poles	Palazzoli code	Pack Qty
16A	2P+ ⚡	<b>476903</b>	1
	3P+ ⚡	<b>476913</b>	1
	3P+N+ ⚡	<b>476923</b>	10
32A	2P+ ⚡ / 3P+ ⚡	<b>476905</b>	10
	3P+N+ ⚡	<b>476925</b>	10
63A	2P+ ⚡ / 3P+ ⚡ / 3P+N+ ⚡	<b>476907</b>	1
125A	2P+ ⚡ / 3P+ ⚡ / 3P+N+ ⚡	<b>476909</b>	1

Features: ensures the IP67 protection rating when the plug is not in use.

XCEE-EX PLUG  
with watertight cap



# TAIS-EX





## TAIS-EX Zone 2, 21, 22

Interlocked socket-outlets in antistatic thermosetting GRP

### ADVANTAGES



1

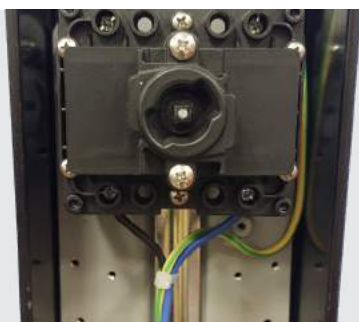
The TAIS-EX enclosure, made of carbon-fibre-reinforced thermosetting GRP, prevents the build-up of electrostatic charges, thus preventing the ignition of explosive gas, vapour or dust atmospheres.

The handle of the socket-outlet allows up to 3 padlocks to be used to ensure that safety procedures are followed during maintenance.

2



3



The interlocking mechanism is in metal. The cover is fixed to the body with stainless steel screws. The circuit breaker is category AC-23A with 10kA conditional short-circuit current rating.

TAIS-EX is the only series that allows to create sets of ATEX socket-outlets as easily as standard distribution boards.

4



For quick and easy installation, scan the QR code.





## TAIS-EX Zone 2, 21, 22

Interlocked socket-outlets in antistatic thermosetting GRP



Atex execution - Gas	II 3G - Ex ec nC IIC T6...T3 Gc
Atex execution - Dust	II 2D - Ex tb IIIC T 70°C...105°C Db
Body material	Palazzoli antistatic Thermosetting GRP
Colour	RAL 9005 Jet black
Protection rating	IP66
Additional IP rating	IP66/IP67
Surface resistance	<10 <sup>9</sup> Ω (prevention of electrostatic charge accumulation)
Resistance to abnormal heat and fire	960°C
Flammability class	V-0
Insulation class	II
Ambient operating temperature	See table
Ambient storage temperature	-50°C - +90°C
Rated current	16A - 32A - 50A - 63A
Operating voltage	50V - 690V
Insulation voltage	690V
Operating frequency	50/60Hz



### DIRECTIVES

2014/34/EU (ATEX)  
2011/65/EU (RoHS)  
2012/19/EU (WEEE)

### PRODUCT STANDARDS

IEC/EN 60079-0  
IEC/EN 60079-7  
IEC/EN 60079-15  
IEC/EN 60079-31  
IEC/EN 60309-1  
IEC/EN 60309-2  
IEC/EN 60309-4  
IEC/EN 63000

Rated operating current:		16A	32A	40A	50A	63A	
Thermal current I <sub>th</sub>	A	16	32	40	50	63	
AC-21A	110V	A	16	32	40	50	63
	230V						
	400V						
	500V						
AC-22A	110V	A	16	32	40	50	63
	230V						
	400V						
	500V						
AC-23A	110V	A	16	32	40	50	63
	230V						
	400V						
	500V						
AC-23A	110V	kW	2.4	4.9	6.1	7.6	9.6
	230V		5.1	10.2	12.7	15.9	20.1
	400V		8.9	17.7	22.2	27.7	34.9
	500V		11.1	22.2	27.7	34.6	43.6

Wiring data:		16A	32A	40A	50A	63A
Entry cable diameter	mm	12.5 - 25		19-32		
Entry cable cross-section	mm <sup>2</sup>	1-10		6-25		
Tightening torque	Nm	2		3		

Technical data sheets updated to new standards on [palazzoli.com](http://palazzoli.com) website



## TAIS-EX Zone 2, 21, 22

Interlocked socket-outlets in antistatic thermosetting GRP

### Ambient operating temperature

Version	Rated current (A)	Ambient operating temperature (°C)	Surface operating temperature (°C) (Dust)	Temperature class (Gas)
Direct	16	-40 ... +50	T70	T6
		-40 ... +65	T85	T5
	32	-40 ... +40	T70	T5
		-40 ... +65	T95	T4
	63	-40 ... +40	T80	T4
		-40 ... +65	T105	T3
Fuse	16	-40 ... +50	T70	T4
	32	-40 ... +40	T85	T3
	40/50	-40 ... +40	T95	T3

### Ambient operating temperature for switches

Rated current (A)	Ambient operating temperature (°C)	Surface operating temperature (°C) (Dust)	Temperature class (Gas)
16	-40 ... +60	T80	T6
25	-40 ... +60	T85	T5
32	-40 ... +60	T90	T5
40/50	-40 ... +60	T90	T5
63	-40 ... +60	T95	T5
100	-40 ... +60	T105	T4

### Table for selecting plugs that can be combined

Rated current		
Socket-outlets with fuses (A)	Socket-outlet without protection (A)	Plug (A)
16	16	16
32	32	32
40/50	63	63



For ATEX installation, the QR code.





## TAIS-EX Zones 2, 21, 22

Interlocked socket-outlets in antistatic thermosetting GRP

MODULE 125



Wall-mounted interlocked  
socket-outlets  
50/60Hz IP66/IP67

Rated current (A)	Rated voltage (V)	Voltage colour	Poles	h ref.	Palazzoli code	Pack Qty
16 M32 entry	110	Yellow	2P+⊕	4	<b>461124EX</b>	1
	110	Yellow	3P+⊕	4	<b>461134EX</b>	1
	110	Yellow	3P+N+⊕	4	<b>461144EX</b>	1
	230	Blue	2P+⊕	6	<b>461126EX</b>	1
	230	Blue	3P+⊕	9	<b>461139EX</b>	1
	230	Blue	3P+N+⊕	9	<b>461149EX</b>	1
	400	Red	2P+⊕	9	<b>461129EX</b>	1
	400	Red	3P+⊕	6	<b>461136EX</b>	1
	400	Red	3P+N+⊕	6	<b>461146EX</b>	1
	500	Black	3P+⊕	7	<b>461137EX</b>	1
32 M32 entry	110	Yellow	2P+⊕	4	<b>461224EX</b>	1
	110	Yellow	3P+⊕	4	<b>461234EX</b>	1
	110	Yellow	3P+N+⊕	4	<b>461244EX</b>	1
	230	Blue	2P+⊕	6	<b>461226EX</b>	1
	230	Blue	3P+⊕	9	<b>461239EX</b>	1
	230	Blue	3P+N+⊕	9	<b>461249EX</b>	1
	400	Red	2P+⊕	9	<b>461229EX</b>	1
	400	Red	3P+⊕	6	<b>461236EX</b>	1
	400	Red	3P+N+⊕	6	<b>461246EX</b>	1
	500	Black	3P+⊕	7	<b>461237EX</b>	1
63 M40 entry	110	Yellow	2P+⊕	4	<b>461324EX</b>	1
	110	Yellow	3P+⊕	4	<b>461334EX</b>	1
	110	Yellow	3P+N+⊕	4	<b>461344EX</b>	1
	230	Blue	2P+⊕	6	<b>461326EX</b>	1
	230	Blue	3P+⊕	9	<b>461339EX</b>	1
	230	Blue	3P+N+⊕	9	<b>461349EX</b>	1
	400	Red	2P+⊕	9	<b>461329EX</b>	1
	400	Red	3P+⊕	6	<b>461336EX</b>	1
	400	Red	3P+N+⊕	6	<b>461346EX</b>	1
	500	Black	3P+⊕	7	<b>461337EX</b>	1

Equipment included: technopolymer cable gland.

Technical accessories:



MODULE 125



Wall-mounted interlocked  
socket-outlets with fuse holder base  
50/60Hz IP66/IP67

Rated current (A)	Rated voltage (V)	Voltage colour	Poles	h ref.	Palazzoli code	Pack Qty
16 M32 entry	110	Yellow	2P+⊕	4	<b>462124EX</b>	1
	110	Yellow	3P+⊕	4	<b>462134EX</b>	1
	110	Yellow	3P+N+⊕	4	<b>462144EX</b>	1
	230	Blue	2P+⊕	6	<b>462126EX</b>	1
	230	Blue	3P+⊕	9	<b>462139EX</b>	1
	230	Blue	3P+N+⊕	9	<b>462149EX</b>	1
	400	Red	2P+⊕	9	<b>462129EX</b>	1
	400	Red	3P+⊕	6	<b>462136EX</b>	1
	400	Red	3P+N+⊕	6	<b>462146EX</b>	1
	500	Black	3P+⊕	7	<b>462137EX</b>	1
32 M32 entry	110	Yellow	2P+⊕	4	<b>462224EX</b>	1
	110	Yellow	3P+⊕	4	<b>462234EX</b>	1
	110	Yellow	3P+N+⊕	4	<b>462244EX</b>	1
	230	Blue	2P+⊕	6	<b>462226EX</b>	1
	230	Blue	3P+⊕	9	<b>462239EX</b>	1
	230	Blue	3P+N+⊕	9	<b>462249EX</b>	1
	400	Red	2P+⊕	9	<b>462229EX</b>	1
	400	Red	3P+⊕	6	<b>462236EX</b>	1
	400	Red	3P+N+⊕	6	<b>462246EX</b>	1
	500	Black	3P+⊕	7	<b>462237EX</b>	1
50 M40 entry	110	Yellow	2P+⊕	4	<b>462324EX</b>	1
	110	Yellow	3P+⊕	4	<b>462334EX</b>	1
	110	Yellow	3P+N+⊕	4	<b>462344EX</b>	1
	230	Blue	2P+⊕	6	<b>462326EX</b>	1
	230	Blue	3P+⊕	9	<b>462339EX</b>	1
	230	Blue	3P+N+⊕	9	<b>462349EX</b>	1
	400	Red	2P+⊕	9	<b>462329EX</b>	1
	400	Red	3P+⊕	6	<b>462336EX</b>	1
	400	Red	3P+N+⊕	6	<b>462346EX</b>	1
	500	Black	3P+⊕	7	<b>462337EX</b>	1

Equipment included: technopolymer cable gland.

Features: fuses not included.

Notes: the 50A sockets installed in a distribution board have a maximum rated current of 40A. See guide to the creation of compositions on page 244.

Technical accessories:





# GUIDE TO THE CREATION OF COMPOSITIONS WITH TAIS-EX SOCKET-OUTLETS



**ATEX**  
II 2D Ex tb IIIC  
T 70°...105 °C  
Db

---

II 3G Ex ec nC IIC  
T3/T4/T5/T6 Gc

			ZONES 2, 21-22			
I	V	No. of poles	Entry	M125 	M125 	
16A	230V	2P+≐	M32	<b>461126EX</b>	<b>462126EX</b>	<b>760126EX</b>
	400V	3P+≐	M32	<b>461136EX</b>	<b>462136EX</b>	<b>760136EX</b>
	400V	3P+N+≐	M32	<b>461146EX</b>	<b>462146EX</b>	<b>760146EX</b>
32A	230V	2P+≐	M32	<b>461226EX</b>	<b>462226EX</b>	<b>760226EX</b>
	400V	3P+≐	M32	<b>461236EX</b>	<b>462236EX</b>	<b>760236EX</b>
	400V	3P+N+≐	M32	<b>461246EX</b>	<b>462246EX</b>	<b>760246EX</b>
40A 50A	400V	3P+≐	M40		<b>462336EX</b>	<b>760336EX</b>
	400V	3P+N+≐	M40		<b>462346EX</b>	<b>760346EX</b>
63A	400V	3P+≐	M40	<b>461336EX</b>		<b>760336EX</b>
	400V	3P+N+≐	M40	<b>461346EX</b>		<b>760346EX</b>

Common accessories

**538429EX**  
**538436EX**

Fittings for coupling socket-outlets with boxes IP66

M32  
M40

**532281EX**  
**532286EX**  
**532282EX**  
**532283EX**

Boxes in thermosetting GRP with blind cover for the composition of socket boards IP66/IP67

125x185 x 1 16A-32A socket-outlet  
125x185 x 1 40A-63A socket-outlet  
250x185 x 2 16A-32A socket-outlets  
380x185 x 3 16A-32A socket-outlets

**538800EX**  
**538802EX**  
**538804EX**

Mounting plates in thermosetting GRP with guided system for the creation of multiple socket boards

125x630 x 1 socket-outlet  
250x630 x 2 sockets  
380x630 x 3 socket-outlets

**Common items included for dust and gas:** technopolymer cable gland.  
In the boxes, instructions and labels to correctly identify the ATEX distribution board. Labels must be chosen according to the socket-outlets installed.

## Examples of combinations

125

185

**532281EX**

250

**532282EX**

380

**532283EX**

125

**532286EX**

630

**M125  
16A-32A**

**M125  
16A-32A    M125  
16A-32A**

**M125  
16A-32A    M125  
16A-32A    M125  
16A-32A**

**M125  
40A-63A**



## TAIS-EX Zones 2, 21, 22

Interlocked socket-outlets in antistatic thermosetting GRP



Boxes in thermosetting GRP with blind cover for the composition of socket boards IP66/IP67

Outer dimensions (mm)	Holes	Socket rated current (A)	Installable devices	Palazzoli code	Pack Qty
125x185x125		16 - 32	1	<b>532281EX</b>	1
125x185x125		40 - 63	1	<b>532286EX</b>	1
250x185x125		16 - 32	2	<b>532282EX</b>	1
380x185x125		16 - 32	3	<b>532283EX</b>	1

**Features:** pre-drilled boxes.

**Equipment included:** in the boxes, instructions and labels to correctly identify the ATEX distribution board. Labels must be chosen according to the socket-outlets installed.

**Technical accessories:**



page 26



Mounting plates in thermosetting GRP with guided system for the creation of multiple socket boards

Outer dimensions (mm)	Installable devices	Palazzoli code	Pack Qty
125x630	1	<b>538800EX</b>	1
250x630	2	<b>538802EX</b>	1
380x630	3	<b>538804EX</b>	1

**Equipment included:** pre-arranged with brass grub screws and stainless steel screws for fixing the devices.

**Features:** the guided positioning system simplifies the assembly of the devices onto the plate.



Fittings for coupling socket-outlets with boxes IP66

From hole	To hole	Thread length (mm)	Palazzoli code	Pack Qty
M32	M32	23	<b>538429EX</b>	1
M40	M40	23	<b>538436EX</b>	1

**Features:** they are used to couple socket-outlets with boxes.

# TAIS-EX

electrifies the large mills of Marghera in Italy





## TAIS-EX SERIES Zone 1, 2, 21, 22

Boxes in antistatic thermosetting GRP



Compliance with standards	Directive ATEX 2014/34/EU EN 60079-0 EN 60079-7 EN 60079-31  Directive ATEX 2014/35/EU EN 62208
Atex execution	II 2G 2D  Ex e IIC Gb Ex tb IIIC Db
Material	Palazzoli antistatic thermosetting GRP
Surface resistance (prevention of electrostatic charge accumulation)	< 10 <sup>9</sup> Ω
Protection rating (IP according to IEC/EN 60529)	IP66
Colour	RAL 9005 (black)
Resistance to abnormal heat and fire ("Glow wire" according to IEC/EN 60695-2-10)	960°C
Flammability rating (according to UL94)	VO
Insulation class	II
Operating temperature	-40°C - +40°C -40°C - +50°C -40°C - +60°C -40°C - +70°C -40°C - +75°C (please consult the table)

Table of the max. power dissipation allowed for TAIS-EX boxes

Code	-40°C - +40°C (W)	-40°C - +50°C (W)	-40°C - +60°C (W)	-40°C - +70°C (W)	-40°C - +75°C (W)
532200EX	18	12	8	4	2
532201EX	19	17	11	6	3
532202EX	23	22	15	7	4
532203EX	24	22	17	8	4
532204EX	25	25	23	15	8
532035EX*	8	6	4	2	1
532045EX	10	6	4	2	1
532055EX	12	9	6	3	1
532116EX	13	10	7	3	2
532117EX	15	10	7	3	2
532118EX	20	14	9	5	2
532005EX	11	10	7	3	2
532006EX	11	7	4	2	1
532015EX	16	9	6	3	2
532016EX	15	10	7	3	2
532017EX	17	13	8	4	2
532018EX	22	22	15	7	4

\*The minimum operating temperature is -20 °C.

Technical data sheets updated to new standards on [palazzoli.com](http://palazzoli.com) website



### DIRECTIVES

2014/34/EU (ATEX)

### PRODUCT STANDARDS

IEC/EN 60079-0  
IEC/EN 60079-7  
IEC/EN 60079-31  
IEC/EN 60670-1  
IEC/EN 60670-22



## TAIS-EX SERIES Zone 1, 2, 21, 22

Boxes in antistatic thermosetting GRP



Junction boxes  
in thermosetting GRP  
with high cover  
IP66

Outer dimensions (mm)	Max. power dissipation (W)	Palazzoli code	Pack Qty
125x185x125	18	<b>532200EX</b>	1
190x185x125	19	<b>532201EX</b>	1
250x185x125	23	<b>532202EX</b>	1
290x185x125	24	<b>532203EX</b>	1
380x185x125	25	<b>532204EX</b>	1

**Notes:** the maximum power dissipation is for the maximum ambient temperature of 40°C.



Junction boxes  
in thermosetting GRP  
with low cover  
IP66

Outer dimensions (mm)	Max. power dissipation (W)	Palazzoli code	Pack Qty
92x92x68	8	<b>532035EX*</b>	1
125x92x68	10	<b>532045EX</b>	1
185x92x68	12	<b>532055EX</b>	1
125x125x100	13	<b>532116EX</b>	1
185x125x100	15	<b>532117EX</b>	1
250x125x100	20	<b>532118EX</b>	1

**Notes:** the maximum power dissipation is for the maximum ambient temperature of 40°C.  
\*The minimum operating temperature is -20 °C.



Junction boxes  
in thermosetting GRP  
with high cover  
IP66

Outer dimensions (mm)	Max. power dissipation (W)	Palazzoli code	Pack Qty
92x92x100	11	<b>532005EX</b>	1
125x92x100	11	<b>532006EX</b>	1
185x92x100	16	<b>532015EX</b>	1
125x125x125	15	<b>532016EX</b>	1
185x125x125	17	<b>532017EX</b>	1
250x125x125	22	<b>532018EX</b>	1

**Notes:** the maximum power dissipation is for the maximum ambient temperature of 40°C.



Back plates  
in galvanised steel  
for TAIS boxes

For enclosure code	Plate dimensions (mm)	Palazzoli code	Pack Qty
532035EX-532005EX	59x59	<b>532705</b>	1
532045EX-532006EX	92x58	<b>532714</b>	1
532055EX-532015EX	142x62	<b>532715</b>	1
532116EX-532016EX	86x86	<b>532716</b>	1
532117EX-532017EX	100x86	<b>532717</b>	1
532118EX-532018EX	175x86	<b>532718</b>	1
532200EX-532240EX	95x145	<b>532700</b>	1
532201EX	160x145	<b>532701</b>	1
532202EX-532242EX	220x145	<b>532702</b>	1
532203EX	260x145	<b>532703</b>	1
532204EX-532244EX	333x145	<b>532704</b>	1



Milling cutters  
cup shaped in steel  
for quick drill connection tungsten  
carbide  
gear teeth specific  
for thermosetting GRP

Hole type	Diameter (mm)	Palazzoli code	Pack Qty
M20 - M25 - M32 - M40	20.5 - 25.5 - 32.5 - 40.5	<b>538410</b>	1



# ALUPRES-EX SERIES Zone 1, 2, 21, 22

Boxes in aluminium alloy

Compliance with standards	Directive ATEX 2014/34/EU EN 60079-0 EN 60079-7 EN 60079-31
	Directive ATEX 2014/35/EU EN 62208
Atex execution	II 2G 2D
	Ex e IIC Gb Ex tb IIIC Db
Material	Aluminium alloy
Surface treatment	Passivation with fluoro-zirconium treatment
Paint	Hot polymerised non-toxic, non-ageing polyester
Colour	RAL 9005 (black)
Protection rating (IP according to IEC/EN 60529)	IP66
Insulation class	I
Operating temperature	-40°C - +40°C
	-40°C - +50°C
	-40°C - +60°C
	-40°C - +65°C
	(please consult the table)



Junction boxes  
in aluminium alloy  
with blind walls and back plate  
IP66

Outer dimensions (mm)	Max. power dissipation (W)	Palazzoli code	Pack Qty
92x92x77	10	<b>511910EX*</b>	1
125x125x113	20	<b>511913EX</b>	1
155x155x73	30	<b>150021EX</b>	1
185x185x145	40	<b>511920EX</b>	1
252x185x145	42	<b>511921EX</b>	1

**Equipment included:** earth screws inside and outside the box.

Back plate (except code 511910EX).

**Notes:** the maximum power dissipation is for the maximum ambient temperature of 40°C.

\*The minimum operating temperature is -20 °C.



## DIRECTIVES

2014/34/EU (ATEX)

## PRODUCT STANDARDS

IEC/EN 60079-0  
IEC/EN 60079-7  
IEC/EN 60079-31  
IEC/EN 60670-1  
IEC/EN 60670-22

Table of the max. power dissipation allowed for ALUPRES-EX boxes

Code	-40°C - +40°C (W)	-40°C - +50°C (W)	-40°C - +60°C (W)	-40°C - +65°C (W)
<b>511910EX*</b>	10	7	4	2
<b>511913EX</b>	20	13	7	3
<b>150021EX</b>	30	16	8	4
<b>511920EX</b>	40	24	12	6
<b>511921EX</b>	42	28	14	7
<b>511911EX</b>	12	10	5	2
<b>511912EX</b>	23	13	6	3
<b>511917EX</b>	40	23	11	6
<b>511922EX</b>	45	25	13	6
<b>511923EX</b>	65	40	20	10

\*The minimum operating temperature is -20 °C.

**Technical data sheets updated to new standards on palazzoli.com website**

# ALUPRES-EX

electrifies the SAIPEM drilling plants in Saudi Arabia





## CUSTOMISED ATEX JUNCTION BOXES

TAIS-EX thermosetting GRP enclosures and ALUPRES-EX aluminium enclosures can be completed with cable glands and terminals, to create customised terminal enclosures, suitable to be installed in zone 1,2, 21 and 22, in compliance with the ATEX Directive 2014/34/EU. The configurations customised and certified by a Notified Organism can be made by Palazzoli upon specifications of the customer.

To make the configurations it is necessary to know:

1. Number and type of modular terminal blocks.

The EN50022 rail inside the box can be completed with modular terminal blocks complying with the ATEX Directive and certified according to protection mode Ex-e. The maximum number of usable terminals depends on the physical dimensions of the box, according to the table below, and on the maximum power dissipation.

2. Number, type e positions of the cable glands.

Each enclosure can be drilled on the 4 sides using a max. number of entries that depends on the dimensions of the cable glands and on side area. Cable glands from Palazzoli or any other brand, from M12 to M50, may be used. They must comply with the ATEX Directive and certified with the Ex-e/Ex-ib protection mode. If windowed boxes are used, it is possible to complete them with suitable perforated flanges or blind raised flanges (Table below).

SERIES	CODE OF EMPTY BOX	DIMENSIONS (BxHxD)	DIN GUIDE LENGTH (mm)	MAXIMUM NUMBER OF CABLE GLANDS THAT CAN BE INSTALLED ON EACH SIDE													
				LONG SIDE OF THE BOX (B)							SHORT SIDE OF THE BOX (H)						
				M12	M16	M20	M25	M32	M40	M50	M12	M16	M20	M25	M32	M40	M50
TAIS-EX	532200EX	185x125x125	145	12	8	6	3	2	2	-	6	4	3	2	1	1	-
	532201EX	190x185x125	160	12	8	6	3	2	2	-	12	8	6	3	2	2	-
	532202EX	250x185x125	220	16	14	12	5	4	3	-	12	8	6	3	2	2	-
	532203EX	290x185x125	260	20	16	14	6	5	4	-	12	8	6	3	2	2	-
	532204EX	380x185x125	333	26	24	22	9	7	6	-	12	8	6	3	2	2	-
	532035EX	92x92x68	59	2	1	1	-	-	-	-	2	1	1	-	-	-	-
	532045EX	125x92x68	92	4	3	3	2	-	-	-	2	1	1	-	-	-	-
	532055EX	185x92x68	142	6	4	4	2	-	-	-	2	1	1	-	-	-	-
	532116EX	125x125x100	86	7	4	3	2	1	1	-	6	4	3	2	1	1	-
	532117EX	185x125x100	100	12	8	6	3	2	2	1	6	4	3	2	1	1	-
	532118EX	250x125x100	175	16	14	12	6	4	3	-	6	4	3	2	1	1	-
	532005EX	92x92x100	59	2	1	1	-	-	-	-	2	1	1	-	-	-	-
	532006EX	125x92x100	92	4	3	3	2	-	-	-	2	1	1	-	-	-	-
	532015EX	185x92x100	142	6	4	4	2	-	-	-	2	1	1	-	-	-	-
	532016EX	125x125x125	86	7	5	4	2	1	-	-	6	5	4	2	1	-	-
	532017EX	185x125x125	100	12	7	6	4	3	-	-	6	5	4	2	1	-	-
	532018EX	250x125x125	175	16	10	8	5	4	-	-	6	5	4	2	1	-	-
	ALUPRES-EX	511910EX	92x92x77	69	3	2	2	1	-	-	3	2	2	1	-	-	-
511913EX		125x125x113	100	8	5	4	2	2	-	8	5	4	2	2	2	-	
150021EX		155x155x73	122	10	6	5	3	1	-	10	6	5	3	1	-	-	
511920EX		185x185x145	160	18	12	10	8	4	3	2	18	12	10	8	4	3	2
511921EX		252x185x145	200	24	16	14	10	5	4	3	18	12	10	8	4	3	2
511911EX		125x92x77	100	3	3	2	-	-	-	-	-	-	-	-	-	-	-
511912EX		185x92x77	150	6	5	4	-	-	-	-	-	-	-	-	-	-	-
511917EX		252x125x113	200	16	14	6	5	4	-	-	2	1	-	-	-	-	-
511922EX		220x220x108	190	3	3	2	2	-	-	-	3	3	2	2	-	-	-
511923EX		252x252x197	210	32	28	18	10	8	6	3	15	8	6	6	2	2	1

3. Maximum utilisation current for each terminal.

By specifying this detail it is possible to calculate more precisely the maximum power dissipation and use optimised boxes with more compact dimensions. If this detail cannot be supplied, the maximum rated current should be considered and larger boxes will have to be used.

4. Ambient temperature

Palazzoli's thermosetting GRP boxes of the TAIS-EX series and aluminium alloy boxes of the ALUPRES-EX series can be used at different temperatures. The complete tables are at page 20 for the TAIS-EX series and page 22 for the ALUPRES-EX series. Also in this case, by carefully choosing the temperature range, it is possible to use optimised boxes with more compact dimensions.





# REQUEST FORM FOR CUSTOMISED ATEX JUNCTION BOXES

## DATA REQUIRED

CODE OF EMPTY PALAZZOLI BOX: \_\_\_\_\_

QUANTITY TO BE PRODUCED: \_\_\_\_\_

MAX AMBIENT TEMPERATURE (°C): \_\_\_\_\_

BRAND OF TERMINAL: \_\_\_\_\_

(if not expressly indicated, the terminals are the responsibility of Palazzoli)

INTERNAL COMPOSITION	TERMINAL RATED CROSS-SECTION (mm <sup>2</sup> )						
	2.5	4	6	10	16	25	35
NUMBER OF TERMINALS							
CURRENT PER TERMINAL (A)							

Indicate in the table the number of terminals and the current required for each terminal.

CABLE GLAND MATERIAL: Insulating  Brass

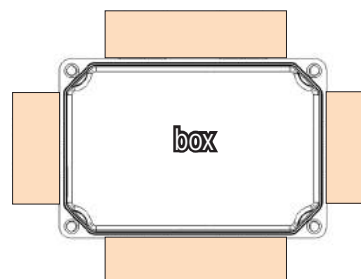
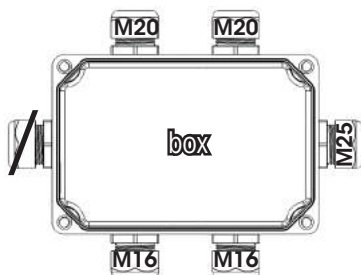
BRAND OF CABLE GLAND: \_\_\_\_\_

(if not expressly indicated, the cable glands are the responsibility of Palazzoli)

EXTERNAL COMPOSITION	CABLE GLAND THREAD						
	M12	M16	M20	M25	M32	M40	M50
NUMBER OF CABLE GLANDS							

Indicate in the table the number of cable glands and their positions on the four sides of the box as in the example below.

Example:



The form must be sent to [export@palazzoli.com](mailto:export@palazzoli.com) or by fax to **+39 030 2015.258**.



# UNI-EX SERIES Zones 1, 2, 21, 22

## Cable glands and adaptors

Compliance with standards	<p>Directive ATEX 2014/34/EU EN 60079-0 EN 60079-7 EN 60079-31</p> <p>IEC/EN 60079-0 IEC/EN 60079-1 IEC/EN 60079-7 IEC/EN 60079-31 ISO 965-1 ISO 965-3</p>
Atex execution	<p> II 2G 2D (cable glands) Ex e IIC, Ex tb IIIC (cable glands for armoured cables) Ex db/eb IIC, Ex tb IIIC (adaptors) Ex d IIC, Ex e IIC, Ex tb IIIC</p>
Material	<p>(technopolymer cable glands) Polyamide body Neoprene gaskets (brass cable glands) Nickel-plated brass body Neoprene gaskets (cable glands for armoured cables) Nickel-plated brass body Graphite gasket (adaptors) Galvanised steel</p>
Colour	Technopolymer cable gland RAL 9005 (black)
Protection rating	IP66/IP68 (cable glands) IP66/IP67 (adaptors)
Operating temperature	<p>(technopolymer cable glands) -20°C - +80°C (M12) -35°C - +95°C (brass cable glands) -40°C - +100°C (cable glands for armoured cables) -60°C - +80°C (adaptors) -40°C - +150°C</p>



### DIRECTIVES

2014/34/EU (ATEX)

### PRODUCT STANDARDS

IEC/EN 60079-0  
IEC/EN 60079-1  
IEC/EN 60079-7  
IEC/EN 60079-31  
ISO 965-1  
ISO 965-3



Cable glands with Pg pitch in technopolymer IP66/IP68

Pg	Max. mounting hole (mm)	Fastening diameter (mm)	Thread length (mm)	Palazzoli code	Pack Qty
9	16	3.5-8.5	8	<b>571009EX</b>	50
11	19	4-10.5	8	<b>571011EX</b>	50
13.5	21	5-12.5	9	<b>571013EX</b>	50
16	23	6.5-14	10	<b>571016EX</b>	50
21	29	8-18.5	11	<b>571021EX</b>	20
29	38	10-25	12	<b>571029EX</b>	20
36	48	24-34	15	<b>571036EX</b>	10
42	55	34-42	15	<b>571042EX</b>	5
48	61	40-48	15	<b>571048EX</b>	5



Cable glands with Pg pitch and long threading in technopolymer IP66/IP68

Pg	Max. mounting hole (mm)	Fastening diameter (mm)	Thread length (mm)	Palazzoli code	Pack Qty
9	16	3.5-5.5	15	<b>571109EX</b>	50
11	19	4-10.5	15	<b>571111EX</b>	50
13.5	21	5-12.5	15	<b>571113EX</b>	50
16	23	6.5-14	15	<b>571116EX</b>	50
21	29	8-18.5	15	<b>571121EX</b>	20
29	38	10-25	15	<b>571129EX</b>	20
36	48	24-34	18	<b>571136EX</b>	10
42	55	34-42	18	<b>571142EX</b>	5
48	61	40-48	18	<b>571148EX</b>	5



Locknuts in insulating material with Pg pitch

Pg	Palazzoli code	Pack Qty
7	<b>571207</b>	50
9	<b>571209</b>	50
11	<b>571211</b>	50
13.5	<b>571213</b>	50
16	<b>571216</b>	50
21	<b>571221</b>	25
29	<b>571229</b>	20
36	<b>571236</b>	10
42	<b>571242</b>	5
48	<b>571248</b>	5



## UNI-EX SERIES Zones 1, 2, 21, 22

### Cable glands and adaptors



Cable glands with metric pitch in technopolymer IP66/IP68

Threading	Max. mounting hole (mm)	Fastening diameter (mm)	Thread length (mm)	Palazzoli code	Pack Qty
M12x1,5	12.5	4-6.5	8	<b>581012EX</b>	50
M16x1.5	16.5	5-10	10	<b>581016EX</b>	50
M20x1.5	20.5	10-14	10	<b>581020EX</b>	50
M25x1.5	25.5	12-18	10	<b>581025EX</b>	20
M32x1.5	32.5	16-25	10	<b>581032EX</b>	20
M40x1.5	40.5	22-32	10	<b>581040EX</b>	20
M50x1.5	50.5	28-38.5	12	<b>581050EX</b>	10
M63x1.5	63.5	40-48	12	<b>581063EX</b>	5



Cable glands with metric pitch and long threading in technopolymer IP66/IP68

Threading	Max. mounting hole (mm)	Fastening diameter (mm)	Thread length (mm)	Palazzoli code	Pack Qty
M12x1,5	12.5	4-6.5	15	<b>581112EX</b>	50
M16x1.5	16.5	5-10	15	<b>581116EX</b>	50
M20x1.5	20.5	10-14	15	<b>581120EX</b>	50
M25x1.5	25.5	12-18	15	<b>581125EX</b>	20
M32x1.5	32.5	16-25	15	<b>581132EX</b>	20
M40x1.5	40.5	22-32	16	<b>581140EX</b>	20
M50x1.5	50.5	28-38.5	16	<b>581150EX</b>	10
M63x1.5	63.5	40-48	16	<b>581163EX</b>	5



Screwcaps with metric threading IP66/IP68

Threading	Max. mounting hole (mm)	Thread length (mm)	Palazzoli code	Pack Qty
M12x1,5	12.5	15	<b>581312EX</b>	1
M16x1.5	16.5	15	<b>581316EX</b>	1
M20x1.5	20.5	15	<b>581320EX</b>	1
M25x1.5	25.5	15	<b>581325EX</b>	1
M32x1,5	32.5	15	<b>581332EX</b>	1
M40x1.5	40.5	15	<b>581340EX</b>	1
M50x1.5	50.5	15	<b>581350EX</b>	1
M63x1.5	63.5	15	<b>581363EX</b>	1



Metric pitch locknuts in technopolymer

Threading	Palazzoli code	Pack Qty
M12x1,5	<b>581212</b>	50
M16x1.5	<b>581216</b>	50
M20x1.5	<b>581220</b>	50
M25x1.5	<b>581225</b>	50
M32x1,5	<b>581232</b>	50
M40x1.5	<b>581240</b>	20
M50x1.5	<b>581250</b>	10
M63x1.5	<b>581263</b>	5



## UNI-EX SERIES Zones 1, 2, 21, 22

### Cable glands and adaptors



Cable glands in nickel-plated brass with metric threading  
IP66/IP68

Threading	Max. mounting hole (mm)	Fastening diameter (mm)	Thread length (mm)	Palazzoli code	Pack Qty
M12x1.5	12.5	4.5-6.5	15	<b>582112EX</b>	50
M16x1.5	16.5	5-9.5	15	<b>582116EX</b>	50
M20x1.5	20.5	8-13	15	<b>582120EX</b>	50
M25x1.5	25.5	9-16	15	<b>582125EX</b>	20
M32x1.5	32.5	12-21	15	<b>582132EX</b>	20
M40x1.5	40.5	16-27	15	<b>582140EX</b>	20
M50x1.5	50.5	23-35	15	<b>582150EX</b>	10
M63x1.5	63.5	36-48	15	<b>582163EX</b>	5



Cable glands for armoured cables in nickel-plated brass with metric threading  
IP66/IP68

Threading	Max. mounting hole (mm)	Sheath outer diameter (mm)	Sheath inner diameter (mm)	Thread length (mm)	Palazzoli code	Pack Qty
M16	16.5	7-11.5	4-8	15	<b>580416EX</b>	1
M20	20.5	9-15.5	7-12	15	<b>580420EX</b>	1
M25	25.5	13-20	9.5-15.5	15	<b>580425EX</b>	1
M32	32.5	18-27	14-20.5	15	<b>580432EX</b>	1
M40	40.5	23-33.5	17-27	15	<b>580440EX</b>	1
M50	50.5	29-40.5	22-33.5	15	<b>580450EX</b>	1
M63	63.5	40-54	34-47.5	15	<b>580463EX</b>	1

**Notes:** earthing tab available on request.



Nickel-plated brass locknuts with metric pitch

Threading	Palazzoli code	Pack Qty
M12x1.5	<b>582212</b>	50
M16x1.5	<b>582216</b>	50
M20x1.5	<b>582220</b>	50
M25x1.5	<b>582225</b>	25
M32x1.5	<b>582232</b>	20
M40x1.5	<b>582240</b>	10
M50x1.5	<b>582250</b>	10
M63x1.5	<b>582263</b>	5



Gas/metric adaptors in galvanised steel for tube/box connections  
IP66/IP67

Male thread	Female thread	Palazzoli code	Pack Qty
3/8" Gas	M16x1.5	<b>580360EX</b>	1
1/2" Gas	M20x1.5	<b>580361EX</b>	1
3/4" Gas	M25x1.5	<b>580364EX</b>	1
1" Gas	M32x1.5	<b>580365EX</b>	1



Pg/metric adaptors in galvanised steel for tube/box connections  
IP68

Male thread	Female thread	Palazzoli code	Pack Qty
Pg21	M25x1.5	<b>580394EX</b>	1
Pg29	M32x1.5	<b>580395EX</b>	1
Pg36	M40x1.5	<b>580396EX</b>	1

# TAIS-EX

electrifies the Rotterdam regasification plant in Netherlands





# CAMTAIS-EX SERIES Zones 2, 21, 22

Rotary devices in antistatic thermosetting GRP

Atex execution - Gas	II 3G -Ex ec nC IIC T4/ T5/T6 Gc
Atex execution - Dust	II 2D - Ex tb IIIC T 85°C...105°C Db
Body material	Palazzoli antistatic thermosetting GRP
Colour	RAL 9005 Jet black
Protection rating	IP66
Surface resistance	<10° Ω (prevention of electrostatic charge accumulation)
Resistance to abnormal heat and fire	960°C
Flammability class	V-0
Insulation class	II
Ambient operating temperature	See table on page 243
Ambient storage temperature	-50°C - +80°C
Rated current	16A - 25A - 32A - 40A - 63A - 100A
Operating voltage	690V
Insulation voltage	690V
Operating frequency	50/60Hz



## DIRECTIVES

2014/34/EU (ATEX)  
2011/65/EU (RoHS)  
2012/19/EU (WEEE)

## PRODUCT STANDARDS

IEC/EN 60079-0  
IEC/EN 60079-7  
IEC/EN 60079-15  
IEC/EN 60079-31  
IEC/EN 60947-3  
IEC/EN 60947-1  
IEC/EN 63000

Rated operating current:		16A	25A	32A	40A	63A	100A	
Thermal current Ith	A	16	25	32	40	63	100	
AC-21A	230V	A	16	25	32	40	63	100
	400V							
	500V							
	690V							
AC-22A	230V	A	16	25	32	40	63	100
	400V							
	500V							
	690V							
AC-23A	110V	A	16	25	32	40	63	63
	230V							
	400V							
	500V							
	690V							
AC-23A	110V	kW	2.4	3.8	4.9	6.1	9.6	9.6
	230V		5.1	8.0	10.2	12.7	20.1	20.1
	400V		8.9	13.9	17.7	22.2	34.9	34.9
	500V		11.1	17.3	22.2	27.7	43.6	43.6
	690V		15.3	23.9	30.6	38.2	60.2	60.2

Wiring data:		16A	25A	32A	40A	63A	100A
Entry cable cross-section	mm <sup>2</sup>	1-10			6-35		
Tightening torque	Nm	2			3		



Wall-mounted isolator switches  
in thermosetting GRP  
IP66



Rated current (A)	Poles	Enclosure dimensions (mm)	Hole type	Palazzoli code	Pack Qty
16	2	125x185		290162EX	1
	3			290163EX	1
	4			290164EX	1
	2			290252EX	1
25	3	125x185		290253EX	1
	4			290254EX	1
	3			290323EX	1
	4			290324EX	1
32	3	125x185		290403EX	1
	4			290404EX	1
	3			290633EX	1
	4			290634EX	1
40	3	125x185		290403EX	1
	4			290404EX	1
	3			290633EX	1
	4			290634EX	1
63	3	125x185		290633EX	1
	4			290634EX	1
	3			290103EX*	1
	4			290104EX*	1
100	3	185x250		290103EX*	1
	4			290104EX*	1

**Equipment included:** technopolymer cable gland.  
Earthing terminal inside the box.

**Features:** handle padlockable with 3 padlocks up to 8 mm.

\* handle padlockable in the "0" position with 2 padlocks. Under certification.



# CAMALUPRES-EX SERIES Zones 2, 21, 22

Rotary devices in aluminium alloy

Atex execution - Gas	II 3G - Ex ec nC IIC T4/T5/T6 Gc
Atex execution - Dust	II 2D - Ex tb IIIC T 80°C... 105°C Db
Body material	Aluminium alloy
Colour	RAL 9005 Jet black
Protection rating	IP66
Insulation class	I
Ambient operating temperature	-35°C - +65°C (-40°C on request) See table on page 243
Ambient storage temperature	-50°C - +80°C
Rated current	16A - 25A - 32A - 40A - 63A - 100A
Operating voltage	690V
Insulation voltage	690V
Operating frequency	50/60Hz



## DIRECTIVES

2014/34/EU (ATEX)  
2011/65/EU  
2011/65/EU (RoHS)  
2012/19/EU (WEEE)

## PRODUCT STANDARDS

IEC/EN 60079-0  
IEC/EN60079-7  
IEC/EN 60079-15  
IEC/EN 60079-31  
IEC/EN 60947-3  
IEC/EN 60947-1  
IEC/EN 63000

Rated operating current:		16A	25A	32A	40A	63A	100A	
Thermal current I <sub>th</sub>		A 16	25	32	40	63	100	
AC-21A	230V	A	16	25	32	40	63	100
	400V							
	500V							
	690V							
AC-22A	230V	A	16	25	32	40	63	100
	400V							
	500V							
	690V							
AC-23A	110V	A	16	25	32	40	63	63
	230V							
	400V							
	500V							
AC-23A	110V	kW	2.4	3.8	4.9	6.1	9.6	9.6
	230V		5.1	8.0	10.2	12.7	20.1	20.1
	400V		8.9	13.9	17.7	22.2	34.9	34.9
	500V		11.1	17.3	22.2	27.7	43.6	43.6
	690V		15.3	23.9	30.6	38.2	60.2	60.2

## Wiring data:

		16A	25A	32A	40A	63A	100A
Entry cable cross-section	mm <sup>2</sup>	1-10			6-35		
Tightening torque	Nm	2			3		



Wall-mounted isolator switches  
in aluminium alloy  
IP66



Rated current (A)	Poles	Enclosure dimensions (mm)	Entry type	Palazzoli code	Pack Qty
	2			<b>270162EX</b>	1
16	3			<b>270163EX</b>	1
	4			<b>270164EX</b>	1
	2	125x185	M25	<b>270252EX</b>	1
25	3			<b>270253EX</b>	1
	4			<b>270254EX</b>	1
	3			<b>270323EX</b>	1
32	4			<b>270324EX</b>	1
	3			<b>270403EX</b>	1
40	4	125x185	M32	<b>270404EX</b>	1
	3			<b>270633EX</b>	1
63	4			<b>270634EX</b>	1
	3			<b>270103EX*</b>	1
100	4	185x250	M40	<b>270104EX*</b>	1

**Equipment included:** technopolymer cable gland.

Earthing terminal inside and outside the box.

**Features:** handle padlockable with 3 padlocks up to 8 mm.

\* handle padlockable in the "0" position with 2 padlocks. Under certification.



## TAIS MIGNON-EX SERIES Zones 2, 22

Small devices in antistatic thermosetting GRP

Atex execution - Gas	II 3G - Ex nR IIC T6 Gc
Atex execution - Dust	II 3D - Ex tc IIIC T 70°C Dc
Body material	Palazzoli antistatic Thermosetting GRP
Colour	RAL 9005 Jet black
Protection rating	IP66
Surface resistance	<10 <sup>9</sup> Ω
Resistance to abnormal heat and fire	960°C
Flammability class	V-0
Insulation class	II
Ambient operating temperature	-20°C - +40°C
Ambient storage temperature	-50°C - +80°C



Wall-mounted isolator switches and two-way switches in thermosetting GRP IP66

Electrical scheme	Poles	Entry type	Rated current/voltage	Palazzoli code	Pack Qty
Switch	1P	M20	16A 250V~ / 10A 400V~	<b>202271EX</b>	1
Switch	2P	M20	16A 250V~ / 10A 400V~	<b>202282EX</b>	1
Two-way switch	1P	M20	16A 250V~ / 10A 400V~	<b>202276EX</b>	1
Selector switch	1P	M20	16A 250V~ / 10A 400V~	<b>202275EX</b>	1

**Equipment included:** technopolymer cable gland, M20 type.

**Features:** the lower entry is the predisposition for restricted breathing test.



Push-buttons for wall-mounted in thermosetting GRP IP66

Poles	Entry type	Rated current/voltage	Palazzoli code	Pack Qty
1 NO	M20	10A 400V~	<b>261435EX</b>	1
1 NC	M20	10A 400V~	<b>261445EX</b>	1
1 NO + 1 NC (green - red)	M20	10A 400V~	<b>261432EX</b>	1
1 NO + 1 NC (black - red)	M20	10A 400V~	<b>261433EX</b>	1

**Equipment included:** technopolymer cable gland, M20 type.

**Features:** the lower entry is the predisposition for restricted breathing test.



### DIRECTIVES

2014/34/EU (ATEX)  
2011/65/EU (RoHS)  
2012/19/UE (RAEE)  
2014/35/UE (LVD)

### PRODUCT STANDARDS

EN 60079-15:2010  
EN 60079-0/A11:2013  
EN 50581:2012  
EN 60079-31:2014  
EN 60669-1:1999  
EN IEC 63000:2018  
EN 60669-1:1999/A2:2008  
EN 60669-1:1999/A1:2002  
EN 60079-0:2012  
EN 60669-1/IS1:2009





## ALARM-EX Zones 2, 21, 22

Sirens and horn in aluminium alloy

Atex execution - Gas	II 3G - Ex nA IIC T3 Gc
Atex execution - Dust	II 2D - Ex tb IIIC T 65 °C Db
Body material	Aluminium alloy (body)
Colour	RAL 9005 Jet black (box) RAL 2011 Deep orange (cover)
Protection rating	IP66 according to IEC 60598-1
Corrosivity category	Equivalent to C4-M / C3-H
Insulation class	I
Ambient operating temperature	-20°C - +40°C
Ambient storage temperature	-50°C - +80°C
Operating voltage	24VAC - 230VAC
Operating frequency	50/60Hz
Operation	Continuous
Entry cable diameter	10 - 14 mm



Sirens in aluminium alloy  
with vibrating membrane  
50/60Hz IP66

Rated voltage (V)	Sound level (dB)	Initial power (VA)	Vibrating power (VA)	Palazzoli code	Pack Qty
24	105	60	25	<b>900453EX</b>	1
110	105	60	25	<b>900463EX</b>	1
230	105	60	25	<b>900473EX</b>	1

**Equipment included:** M20 technopolymer cable gland.  
Terminal block in insulating thermosetting GRP.  
Earthing terminal inside and outside the box.



Directional horn for sirens

Max. diameter (mm)	Projection siren+horn (mm)	Palazzoli code	Pack Qty
112	238	<b>900449</b>	1

**Equipment included:** complete with stainless steel fixing screws.



### DIRECTIVES

2014/34/UE (ATEX)  
2014/35/UE (LVD)  
2014/30/UE (EMC)  
2011/65/UE (RoHS)  
2012/19/UE (RAEE)

### PRODUCT STANDARDS

EN 60079-31:2014  
EN 60079-15:2010  
EN 60079-0/A11:2013  
EN IEC 63000:2018  
EN 50581:2012  
EN 60079-0:2012  
EN 62080:2009



## Lighting

The Company has consolidated experience in extreme environments, where the presence of oxidising chemicals, saline solutions, acids and motor and vegetable oils has forged the products for which Palazzoli is the absolute market leader.

The IEC regulatory system, in particular with the IEC 60079-10 series of standards, which establishes the basic rules for electrical installations in places where there is a danger of explosion due to the presence of both gas and combustible dust, with regard to the classification of hazardous areas, refers to a particular calculation model, called the IEC zone system.

This model is based on the determination of the probability of the formation of an explosive atmosphere and its persistence over time in the environments, which thus become fundamental parameters for the classification of hazardous areas.



### Danger

### Gases - vapours

### Dusts

Permanent

**ZONE 0**

**ZONE 20**

Occasional

**ZONE 1**

**ZONE 21**

Not likely

**ZONE 2**

**ZONE 22**

Floodlights

Page 36

Light fixtures

Page 48

Pendant light fixtures

Page 54

Traditional

Page 60

# TIGUA-EX





## TIGUA-EX floodlight - Zones 1, 2, 21, 22

4,000 K - 230,000 h

### ADVANTAGES

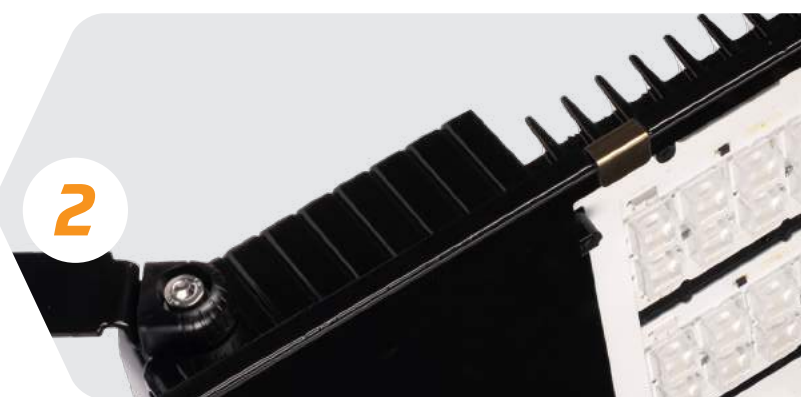


1

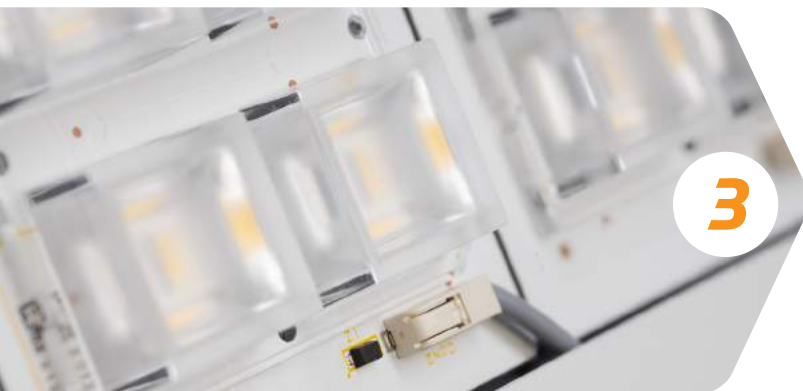
The DALI power supply integrated in the TIGUA-EX body is resin-coated and certified for explosion hazardous environments. In the versions for zone 1 versions, the polycarbonate lenses are sealed onto the LED module by means of silicone resin.

The body is made of EN 44300 aluminium alloy with low copper content, with passivation treatment and painting that make it suitable for harsh environments, corrosion class C5-M / C4-H.

2



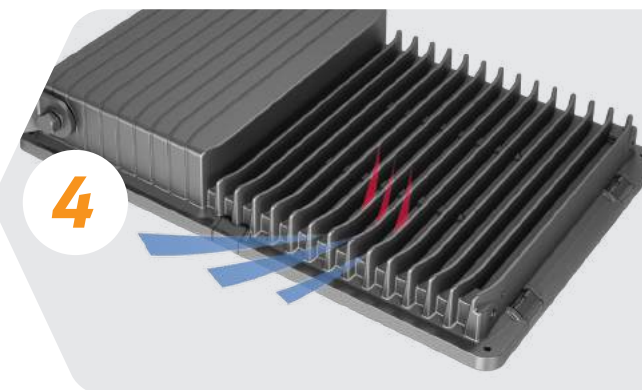
3



The optics are made from specialised lenses ensuring that the luminous flux is evenly distributed. A well-lit environment makes for a safer place.

TIGUA-EX's long service life is guaranteed by high-level electronic components, exclusive thermal management system, X-ray inspection of LED welds, 100% testing with 24-hour burn-in cycles, and Gore-Tex® anti-condensation breathing valve.

4





# TIGUA-EX floodlight - Zones 1, 2, 21, 22

4,000 K - 230,000 h



7

## YEARS OF WARRANTY

2 YEARS OPTIONALLY EXTENDABLE TO 7



## DIRECTIVES

2014/30/EU (EMC)  
2014/34/EU (ATEX)  
2011/65/EU (RoHS)  
2012/19/EU (WEEE)

## PRODUCT STANDARDS

EN 55015  
EN 60079-0  
EN 60079-18  
EN 60079-31  
EN 60079-7  
EN 60598-1  
EN 60598-2-1  
EN 60598-2-5  
EN 60598-2-22  
EN 61000-3-2  
EN 61000-3-3  
EN 61547  
EN 62311  
EN 62493  
EN 62471  
IEC/TR 62778  
EN 63000

Atex execution - Gas	II 2G - Ex eb mb IIC T4 Gb
Atex execution - Dust	II 2D - Ex tb IIIC T 85°C Db
Body material	Marine aluminium alloy (EN 44300)
Surface treatment	Fluorozirconate passivation
Surface finish	Non-toxic polyester, anti UV, kiln-polymerised coating
Colour	RAL 9005 Jet black
Diffuser material	Extra clear tempered glass
Protection rating	IP66
Impact resistance	7J (body) 4J (glass)
Corrosivity category	Equivalent to C5-M / C4-H
Mounting system	U bracket with adjustment range of -135° to 135°
Ambient operating temperature	-35°C - +50°C (-40°C on request)
Ambient storage temperature	-40°C - +70°C
Actual efficacy of the device	Up to 115 lm/W
Colour temperature	4,000 K
Optics features	Non-ageing UV-resistant polycarbonate lenses sealed to the LED module by silicone resin
Colour rendering index according to EN 62717	CRI ≥ 80
Colour consistency	MacAdam 4-step
Photobiological risk	RGO - Exempt Group (EN 62471)
Residual flicker	< 4%
Luminous flux maintenance	L90 B10 110,000h Tq= +40 °C L90 B10 230,000h Tq= +25 °C
Insulation class	I
Supply voltage	110-277 Vac/110-250 Vdc: 50 W/72 W/101 W 160-277 Vac/160-250 Vdc: 144W 0/50/60Hz
Surge protection	6 kV common mode and differential mode (IEC 61000-4-5)
Power factor	≥ 0.95
Type of power supply	Spring clamps and M20 cable gland
Max. conductor cross-section	1 - 2.5 mm <sup>2</sup>
Entry cable diameter	10 - 14 mm

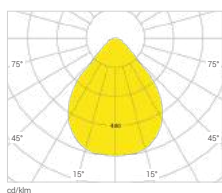
Versions with colour temperatures from 3000K to 6500K and ambient temperatures down to -40°C are also available.

TAIS-EX series junction boxes certified for zone 1, 2, 21, 22 complete with cable glands and terminals for larger cable diameters and/or in/out solutions are available at page 20, on request.



## TIGUA-EX floodlight - Zones 1, 2, 21, 22

4,000 K - 230,000 h

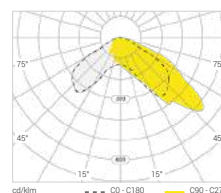


Symmetrical 81° extra wide beam optics

Power (W)	Nominal flux (lm)Tj=25° C	Output flux (lm)Tq=25° C	Max. ambient temperature (°C)	Version	Palazzoli code
50	6980	5808	+50	DALI	<b>817021EX</b>
72	9950	8280	+40		<b>817022EX</b>
101	13950	11615	+50		<b>817023EX</b>
144	19850	16560	+40		<b>817024EX</b>

**Equipment included:** wall-mounting bracket.

**Notes:** the stated flux and power values may be subject to a +/- 7% tolerance.



Asymmetrical 50° extra wide beam optics

Power (W)	Nominal flux (lm)Tj=25° C	Output flux (lm)Tq=25° C	Max. ambient temperature (°C)	Version	Palazzoli code
50	6980	5808	+50	DALI	<b>817221EX</b>
72	9950	8280	+40		<b>817222EX</b>
101	13950	11615	+50		<b>817223EX</b>
144	19850	16560	+40		<b>817224EX</b>

**Equipment included:** wall-mounting bracket.

**Notes:** the stated flux and power values may be subject to a +/- 7% tolerance.

## Accessories TIGUA-EX



Protection guard

Manufacturing material	Palazzoli code
galvanised steel	<b>811911</b>



Support for wall mounting with projecting arm – 750mm projection

Manufacturing material	Palazzoli code
painted galvanised steel	<b>811914</b>



Universal mounting bracket for pole-top installation for 60 mm and 76 mm nominal pole Ø

Manufacturing material	Palazzoli code
painted galvanised steel	<b>811908</b>



Kit consisting of collar and plate for 60 mm and 76 mm nominal pole Ø

Manufacturing material	Palazzoli code
painted galvanised steel	<b>811912</b>

**Accessories** junction boxes  
TAIS-EX at page 20  
on request



# XTIGUA-EX







## XTIGUA-EX floodlight - Zones 1, 2, 21, 22

4,000 K - 230,000 h

### ADVANTAGES



1

The DALI power supply integrated in the XTIGUA-EX body is resin-coated and certified for explosion hazardous environments. In the versions for zone 1 versions, the polycarbonate lenses are sealed onto the LED module by means of silicone resin.

The body is made of EN 44300 aluminium alloy with low copper content, with passivation treatment and painting that make it suitable for harsh environments, corrosion class C5-M / C4-H.

2



3

The optics are made from specialised lenses ensuring that the luminous flux is evenly distributed. A well-lit environment makes for a safer place.



4

XTIGUA-EX's long service life is guaranteed by high-level electronic components, exclusive thermal management system, X-ray inspection of LED welds, 100% testing with 24-hour burn-in cycles, and Gore-Tex® anti-condensation breathing valve.





# XTIGUA-EX floodlight - Zones 1, 2, 21, 22

4,000 K - 230,000 h



7

## YEARS OF WARRANTY

2 YEARS OPTIONALLY EXTENDABLE TO 7



## DIRECTIVES

2014/30/EU (EMC)  
2014/34/EU (ATEX)  
2011/65/EU (RoHS)  
2012/19/EU (WEEE)

## PRODUCT STANDARDS

EN 55015  
EN 60079-0  
EN 60079-18  
EN 60079-31  
EN 60079-7  
EN 60598-1  
EN 60598-2-1  
EN 60598-2-5  
EN 60598-2-22  
EN 61000-3-2  
EN 61000-3-3  
EN 61547  
EN 62311  
EN 62493  
EN 62471  
IEC/TR 62778  
EN 63000

Atex execution - Gas	II 2G - Ex eb mb IIC T4 Gb
Atex execution - Dust	II 2D - Ex tb IIIC T 85°C Db
Body material	Marine aluminium alloy (EN 44300)
Surface treatment	Fluorozirconate passivation
Surface finish	Non-toxic polyester, anti UV, kiln-polymerised coating
Colour	RAL 9005 Jet black
Diffuser material	Extra clear tempered glass
Protection rating	IP66
Impact resistance according to IEC 60079-0	7J (body) 4J (glass)
Corrosivity category according to ISO 12944	Equivalent to C5-M / C4-H
Mounting system	U-bracket with adjustment range of -135° to +135°
Ambient operating temperature	-35°C - +45°C (-40°C on request)
Ambient storage temperature	-40°C - +70°C
Actual efficacy of the device	Up to 115 lm/W
Colour temperature	4,000 K
Optics features	Non-ageing UV-resistant polycarbonate lenses sealed to the LED module by silicone resin
Colour rendering index according to EN 62717	CRI ≥ 80
Colour consistency	MacAdam 4-step
Photobiological risk	RG0 - Exempt Group (EN 62471)
Residual flicker	< 4%
Luminous flux maintenance	L90 B10 110,000h Tq= +40°C L90 B10 230,000h Tq= +25°C
Insulation class	I
Supply voltage	160-277 Vac/160-250 Vdc 0/50/60Hz
Surge protection	6 kV common mode and differential mode (IEC 61000-4-5)
Power factor	≥ 0.95
Type of power supply	Spring clamps and M20 cable gland
Max. conductor cross-section	1 - 2.5 mm <sup>2</sup>
Entry cable diameter	10 - 14 mm

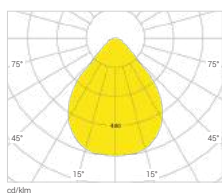
Versions with colour temperatures from 3000K to 6500K and ambient temperatures down to -40°C are also available.

TAIS-EX series junction boxes certified for zone 1, 2, 21, 22 complete with cable glands and terminals for larger cable diameters and/or in/out solutions are available at page 20, on request.



## XTIGUA-EX floodlight - Zones 1, 2, 21, 22

4,000 K - 230,000 h

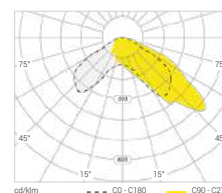


Symmetrical 81° extra wide beam optics

Power (W)	Nominal flux (lm)Tj=25° C	Output flux (lm)Tq=25° C	Max. ambient temperature (°C)	Version	Palazzoli code
151	20900	17365	+45	DALI	<b>818021EX</b>
216	29800	24840	+40		<b>818022EX</b>
201	27800	23115	+35		<b>818023EX</b>
288	39800	33120	+30		<b>818024EX</b>

**Equipment included:** wall-mounting bracket.

**Notes:** the stated flux and power values may be subject to a +/- 7% tolerance.



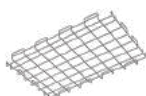
Asymmetrical 50° extra wide beam optics

Power (W)	Nominal flux (lm)Tj=25° C	Output flux (lm)Tq=25° C	Max. ambient temperature (°C)	Version	Palazzoli code
151	20900	17365	+45	DALI	<b>818221EX</b>
216	29800	24840	+40		<b>818222EX</b>
201	27800	23115	+35		<b>818223EX</b>
288	39800	33120	+30		<b>818224EX</b>

**Equipment included:** wall-mounting bracket.

**Notes:** the stated flux and power values may be subject to a +/- 7% tolerance.

## Accessories XTIGUA-EX



Protection grid for XTIGUA LED floodlights

Manufacturing material	Palazzoli code
galvanised steel	<b>818992</b>



Cross beam for pole-top installation for 1 XTIGUA series floodlight

Manufacturing material	Palazzoli code
painted galvanised steel	<b>818990</b>

**Notes:** cross beam suitable for mounting up to 2 floodlights. The cross beam can be installed on  $\varnothing$  60 to  $\varnothing$  76 mm poles.



Cross beam for pole-top installation for 2 or 4 XTIGUA series floodlights

Manufacturing material	Palazzoli code
painted galvanised steel	<b>818991</b>

**Notes:** cross beam suitable for mounting up to 4 floodlights. The cross beam can be installed on  $\varnothing$  60 to  $\varnothing$  76 mm poles.

**Accessories** junction boxes  
TAIS-EX at page 20  
on request





# TIGUA-EX floodlight - Zones 2, 21, 22

4,000 K - 230,000 h



7

## YEARS OF WARRANTY

2 YEARS OPTIONALLY EXTENDABLE TO 7



## DIRECTIVES

2014/30/EU (EMC)  
2014/34/EU (ATEX)  
2011/65/EU (RoHS)  
2012/19/EU (WEEE)

## PRODUCT STANDARDS

EN 55015  
EN 60079-0  
EN 60079-18  
EN 60079-31  
EN 60079-7  
EN 60598-1  
EN 60598-2-1  
EN 60598-2-5  
EN 60598-2-22  
EN 61000-3-2  
EN 61000-3-3  
EN 61547  
EN 62311  
EN 62493  
EN 62471  
IEC/TR 62778  
EN 63000

Atex execution - Gas	II 3G - Ex ec mc IIC T4 Gc
Atex execution - Dust	II 2D - Ex tb IIIC T 85°C Db
Body material	Marine aluminium alloy (EN 44300)
Surface treatment	Fluorozirconate passivation
Surface finish	Non-toxic polyester, anti UV, kiln-polymerised coating
Colour	RAL 9005 Jet black
Diffuser material	Extra clear tempered glass
Protection rating	IP66
Impact resistance according to IEC 60079-0	7J (body) 4J (glass)
Corrosivity category according to ISO 12944	Equivalent to C5-M / C4-H
Mounting system	U-bracket with adjustment range of -135° to +135°
Ambient operating temperature	-35°C - +50°C (-40°C on request)
Ambient storage temperature	-40°C - +70°C
Actual efficacy of the device	Up to 125 lm/W
Colour temperature	4,000 K
Optics features	Non-ageing, UV-resistant PMMA lenses with >90% efficiency and >95% transparency
Colour rendering index according to EN 62717	CRI ≥ 70
Colour consistency	MacAdam 4-step
Photobiological risk	RGO - Exempt Group (EN 62471)
Residual flicker	< 4%
Luminous flux maintenance	L90 B10 110,000h Tq= +40°C L90 B10 230,000h Tq= +25°C
Insulation class	I
Supply voltage	110-277 Vac/110-250 Vdc: 50 W/72 W/101 W 160-277 Vac/160-250 Vdc: 144W 0/50/60Hz
Surge protection	6 kV common mode and differential mode (IEC 61000-4-5)
Power factor	≥ 0.95
Type of power supply	Spring clamps and M20 cable gland
Max. conductor cross-section	1 - 2.5 mm <sup>2</sup>
Entry cable diameter	10 - 14 mm

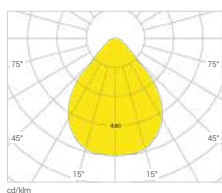
Versions with dedicated optics, colour temperatures from 3000K to 6500K and ambient temperatures down to -40°C are also available.

TAIS-EX series junction boxes certified for zone 1, 2, 21, 22 complete with cable glands and terminals for larger cable diameters and/or in/out solutions are available at page 20, on request.



## TIGUA-EX floodlight - Zones 2, 21, 22

4,000 K - 230,000 h

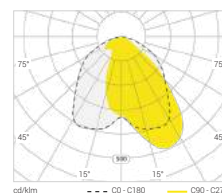


Symmetrical 81° extra wide beam optics

Power (W)	Nominal flux (lm)Tj=25° C	Output flux (lm)Tq=25° C	Max. ambient temperature (°C)	Version	Palazzoli code
50	7600	6312	+50	DALI	<b>837021EX</b>
72	10800	9000	+40		<b>837022EX</b>
101	15150	12625	+50		<b>837023EX</b>
144	21600	18000	+40		<b>837024EX</b>

**Equipment included:** wall-mounting bracket.

**Notes:** the stated flux and power values may be subject to a +/- 7% tolerance.



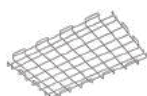
Asymmetrical 23° extra wide beam optics

Power (W)	Nominal flux (lm)Tj=25° C	Output flux (lm)Tq=25° C	Max. ambient temperature (°C)	Version	Palazzoli code
50	7600	6312	+50	DALI	<b>837221EX</b>
72	10800	9000	+40		<b>837222EX</b>
101	15150	12625	+50		<b>837223EX</b>
144	21600	18000	+40		<b>837224EX</b>

**Equipment included:** wall-mounting bracket.

**Notes:** the stated flux and power values may be subject to a +/- 7% tolerance.

## Accessories TIGUA-EX



Protection guard

Manufacturing material	Palazzoli code
galvanised steel	<b>811911</b>



Support for wall mounting with projecting arm – 750mm projection

Manufacturing material	Palazzoli code
painted galvanised steel	<b>811914</b>



Universal mounting bracket for pole-top installation for 60 mm and 76 mm nominal pole Ø

Manufacturing material	Palazzoli code
painted galvanised steel	<b>811908</b>



Kit consisting of collar and plate for 60 mm and 76 mm nominal pole Ø

Manufacturing material	Palazzoli code
painted galvanised steel	<b>811912</b>

**Accessories** junction boxes  
TAIS-EX at page 20  
on request





# XTIGUA-EX floodlight - Zones 2, 21, 22

4,000 K - 230,000 h



7

## YEARS OF WARRANTY

2 YEARS OPTIONALLY EXTENDABLE TO 7



## DIRECTIVES

2014/30/EU (EMC)  
2014/34/EU (ATEX)  
2011/65/EU (RoHS)  
2012/19/EU (WEEE)

## PRODUCT STANDARDS

EN 55015  
EN 60079-0  
EN 60079-18  
EN 60079-31  
EN 60079-7  
EN 60598-1  
EN 60598-2-1  
EN 60598-2-5  
EN 60598-2-22  
EN 61000-3-2  
EN 61000-3-3  
EN 61547  
EN 62311  
EN 62493  
EN 62471  
IEC/TR 62778  
EN 63000

Atex execution - Gas	II 3G - Ex ec mc IIC T4 Gc
Atex execution - Dust	II 2D - Ex tb IIIC T 85°C Db
Body material	Marine aluminium alloy (EN 44300)
Surface treatment	Fluorozirconate passivation
Surface finish	Non-toxic polyester, anti UV, kiln-polymerised coating
Colour	RAL 9005 Jet black
Diffuser material	Extra clear tempered glass
Protection rating	IP66
Impact resistance according to IEC 60079-0	7J (body) 4J (glass)
Corrosivity category according to ISO 12944	Equivalent to C5-M / C4-H
Mounting system	U-bracket with adjustment range of -135° to +135°
Ambient operating temperature	-35°C - +45°C (-40°C on request)
Ambient storage temperature	-40°C - +70°C
Actual efficacy of the device	Up to 130 lm/W
Colour temperature	4,000 K
Optics features	Non-ageing, UV-resistant PMMA lenses with >90% efficiency and >95% transparency
Colour rendering index according to EN 62717	CRI ≥ 70
Colour consistency	MacAdam 4-step
Photobiological risk	RGO - Exempt Group (EN 62471)
Residual flicker	< 4%
Luminous flux maintenance	L90 B10 110,000h Tq= +40°C L90 B10 230,000h Tq= +25°C
Insulation class	I
Supply voltage	160-277 Vac/110-250 Vdc 0/50/60Hz
Surge protection	6 kV common mode and differential mode (IEC 61000-4-5)
Power factor	≥ 0.95
Type of power supply	Spring clamps and M20 cable gland
Max. conductor cross-section	1 - 2.5 mm <sup>2</sup>
Entry cable diameter	10 - 14 mm

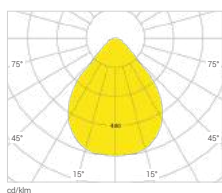
Versions with dedicated optics, colour temperatures from 3000K to 6500K and ambient temperatures down to -40°C are also available.

TAIS-EX series junction boxes certified for zone 1, 2, 21, 22 complete with cable glands and terminals for larger cable diameters and/or in/out solutions are available at page 20, on request.



## XTIGUA-EX floodlight - Zones 2, 21, 22

4,000 K - 230,000 h

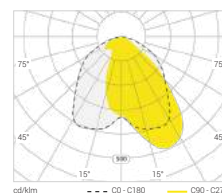


Symmetrical 81° extra wide beam optics

Power (W)	Nominal flux (lm)Tj=25° C	Output flux (lm)Tq=25° C	Max. ambient temperature (°C)	Version	Palazzoli code
151	23600	19630	+45	DALI	<b>838021EX</b>
216	33200	27648	+40		<b>838022EX</b>
201	31500	26208	+35		<b>838023EX</b>
288	44300	36864	+30		<b>838024EX</b>

**Equipment included:** wall-mounting bracket.

**Notes:** the stated flux and power values may be subject to a +/- 7% tolerance.



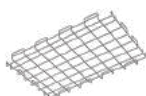
Asymmetrical 23° extra wide beam optics

Power (W)	Nominal flux (lm)Tj=25° C	Output flux (lm)Tq=25° C	Max. ambient temperature (°C)	Version	Palazzoli code
151	23600	19630	+45	DALI	<b>838221EX</b>
216	33200	27648	+40		<b>838222EX</b>
201	31500	26208	+35		<b>838223EX</b>
288	44300	36864	+30		<b>838224EX</b>

**Equipment included:** wall-mounting bracket.

**Notes:** the stated flux and power values may be subject to a +/- 7% tolerance.

## Accessories X-TIGUA-EX



Protection grid for XTIGUA LED floodlights

Manufacturing material	Palazzoli code
galvanised steel	<b>818992</b>



Cross beam for pole-top installation for 1 XTIGUA series floodlight

Manufacturing material	Palazzoli code
painted galvanised steel	<b>818990</b>

**Notes:** cross beam suitable for mounting up to 2 floodlights. The cross beam can be installed on  $\varnothing$  60 to  $\varnothing$  76 mm poles.



Cross beam for pole-top installation for 2 or 4 XTIGUA series floodlights

Manufacturing material	Palazzoli code
painted galvanised steel	<b>818991</b>

**Notes:** cross beam suitable for mounting up to 4 floodlights. The cross beam can be installed on  $\varnothing$  60 to  $\varnothing$  76 mm poles.

**Accessories** junction boxes  
TAIS-EX at page 20  
on request



# RINO LED-EX







## RINO LED-EX light fixture - Zones 1, 2, 21, 22

### ADVANTAGES



1

The light fixture is ATEX-certified by a third party for zone 1, 2, 21, 22. The driver placed inside it is resin-coated and suitable for highly explosive environments. In the versions for zone 1, the LED board is sealed with silicone resin.

The stainless steel casing and the special silicone seal guarantee high resistance to corrosion and aggressive atmospheres.

2



The possibility of special solutions makes the light fixture suitable for installation in any environment, whether with very high temperatures (up to +60 °C) or very low temperatures (down to -40 °C). The fastening system with eyebolts enables the device to be mounted to the ceiling without opening it.

3



The extra wide beam, narrow beam and comfort optics use specialist lenses with a glare index of UGR<22.

4





# RINO LED-EX light fixture - Zones 1, 2, 21, 22



7

**YEARS OF WARRANTY**

2 YEARS OPTIONALLY EXTENDABLE TO 7

**DIRECTIVES**

2014/30/EU (EMC)  
2014/34/EU (ATEX)  
2011/65/EU (RoHS)  
2012/19/EU (WEEE)

**PRODUCT STANDARDS**

EN 55015  
EN 60079-0  
EN 60079-18  
EN 60079-31  
EN 60079-7  
EN 60598-1  
EN 60598-2-1  
EN 60598-2-22  
EN 61000-3-2  
EN 61000-3-3  
EN 61547  
EN 62311  
EN 62493  
EN 62471  
IEC/TR 62778  
EN 63000

Atex execution - Gas	II 2G - Ex eb mb IIC T6/T5 Gb
Atex execution - Dust	II 2D - Ex tb IIIC T 85°C Db
Body material	AISI 304 stainless steel
Surface treatment	Natural finish
Diffuser material	Extra clear tempered glass
Protection rating	IP65
Impact resistance according to IEC 60079-0	7J (body) 4J (glass)
Corrosivity category	Equivalent to C5-H
Mounting system	Pair of eyebolts in AISI 304 stainless steel
Ambient operating temperature	-35°C - +60°C (-40°C on request) 0°C - +45°C (emergency versions)
Ambient storage temperature	-40°C - +75°C -20°C - +60°C (emergency versions)
Actual efficacy of the device	Up to 148 lm/W
Colour temperature	4,000 K
Optics features	Anti-ageing- and UV-resistant silicone resin with > 95% efficiency
Colour rendering index values	CRI ≥ 80
Photobiological risk	RG0 - Exempt Group (EN 62471)
Residual flicker	< 4%
Luminous flux maintenance	L80 B10 @90,000h Tq= +25°C
Emergency battery lifetime	1h - 3h
Emergency battery charging time	24h
Insulation class	I
Supply voltage	220-240V - - 180-240Vcc 110-277 Vac/110-250 Vdc (DALI) 0/50/60Hz
Surge protection	6 kV common mode and differential mode (IEC 61000-4-5)
Power factor	≥ 0.95
Type of power supply	Spring clamps and M20 cable gland
Max. conductor cross-section	1 - 2.5 mm <sup>2</sup>
Entry cable diameter	10 - 14 mm

**Feed-through wiring versions are also available, in AISI 316L stainless steel and with colour temperatures from 3000K to 6500K.**

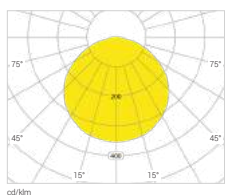
**TAIS-EX series junction boxes certified for zone 1, 2, 21, 22 complete with cable glands and terminals for larger cable diameters and/or in/out solutions are available at page 20, on request.**



## RINO LED-EX light fixture - Zones 1, 2, 21, 22

690 mm 4,000 K - 90,000 h

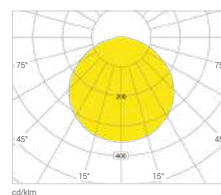
1300 mm 4,000 K - 90,000 h



Symmetrical 110° extra wide beam optics

Power (W)	Nominal flux (lm)Tj=25° C	Output flux (lm)Tq=25° C	Max. ambient temperature (°C)	Version	Palazzoli code
<b>AISI 304 stainless steel</b>					
23	4080	3400	+60		<b>821172EX</b>
36	6200	5180	+50	on-off	<b>821272EX</b>
56	9450	7870	+45		<b>821372EX</b>
71	11550	9623	+35		<b>821472EX</b>
<b>Emergency</b>					
36	6200	5180 967 in EM 9623	+45	on-off emergency 1h	<b>821270EX</b>
71	11550	912 in EM 9623	+35	1h	<b>821470EX</b>
36	6200	5180 420 in EM 9623	+45	on-off emergency 3h	<b>821273EX</b>
71	11550	9623 414 in EM	+35	3h	<b>821473EX</b>

**Equipment included:** pair of eyebolts in AISI 304 stainless steel for pendant mounting.  
**Notes:** the stated flux and power values may be subject to a +/- 7% tolerance.



Symmetrical 110° extra wide beam optics

Power (W)	Nominal flux (lm)Tj=25° C	Output flux (lm)Tq=25° C	Max. ambient temperature (°C)	Version	Palazzoli code
<b>AISI 304 stainless steel</b>					
47	8200	6831	+60		<b>821572EX</b>
71	11690	9736	+45	on-off	<b>821672EX</b>
86	14800	12353	+45	DALI	<b>821772EX</b>
<b>Emergency</b>					
71	11690	9736 925 in EM 12353	+45	on-off emergency 1h	<b>821670EX</b>
86	14800	930 in EM 12353		<b>821770EX</b>	
71	11690	9736 420 in EM 12353	+45	on-off emergency 3h	<b>821673EX</b>
86	14800	400 in EM 12353		<b>821773EX</b>	

**Equipment included:** pair of eyebolts in AISI 304 stainless steel for pendant mounting.  
**Notes:** the stated flux and power values may be subject to a +/- 7% tolerance.

### THROUGH WIRING

RINO ATEX is equipped with through wiring connection

- 1 M20 cable gland in technopolymer
- 2 M20 caps in technopolymer

Terminal block spring 4 mm<sup>2</sup>, 2P+≡



1 entry on 1 side



2 entries on 1 side



M20 cable gland in technopolymer

**Accessories** RINO LED-EX at page 61



## RINO LED-EX light fixture - Zones 2, 21, 22



7

### YEARS OF WARRANTY

2 YEARS OPTIONALLY EXTENDABLE TO 7



### DIRECTIVES

2014/30/EU (EMC)  
2014/34/EU (ATEX)  
2011/65/EU (RoHS)  
2012/19/EU (WEEE)

### PRODUCT STANDARDS

EN 55015  
EN 60079-0  
EN 60079-18  
EN 60079-31  
EN 60079-7  
EN 60598-1  
EN 60598-2-1  
EN 60598-2-22  
EN 61000-3-2  
EN 61000-3-3  
EN 61547  
EN 62311  
EN 62493  
EN 62471  
IEC/TR 62778  
EN 63000

Atex execution - Gas	II 3G - Ex ec mc IIC T6/T5 Gc
Atex execution - Dust	II 2D - Ex tb IIIC T 85°C Db
Body material	AISI 304 stainless steel Painted galvanised steel
Surface finish	Non-toxic polyester, anti UV, kiln-polymerised coating
Colour	White RAL 9016
Diffuser material	Extra clear tempered glass
Protection rating	IP65
Impact resistance according to IEC 60079-0	7J (body) 4J (glass)
Corrosivity category	Equivalent to C5-H AISI 304 stainless steel
Mounting system	Pair of eyebolts in AISI 304 stainless steel
Ambient operating temperature	-35°C - +55°C (-40°C on request) 0°C - +45°C (emergency versions)
Ambient storage temperature	-40°C - +70°C -30°C - +50°C (emergency versions)
Actual efficacy of the device	Up to 137 lm/W
Colour temperature	4,000 K
Optics features	Non-ageing, UV-resistant PMMA lenses with >90% efficiency and >95% transparency
Colour rendering index values	CRI ≥ 80
Colour consistency	MacAdam 3-step
Photobiological risk	RG0 - Exempt Group (EN 62471)
Residual flicker	< 4%
Luminous flux maintenance	L80 B10 @50,000 h Tq= +25°C
Emergency battery lifetime	1h - 3h
Emergency battery charging time	24h
Insulation class	I
Supply voltage	220-240V~ - 180-240Vcc 0/50/60Hz
Surge protection	6 kV common mode and differential mode (IEC 61000-4-5)
Power factor	≥ 0.95
Type of power supply	Spring clamps and M20 cable gland
Max. conductor cross-section	1 - 2.5 mm²
Entry cable diameter	10 - 14 mm

Versions are also available with ambient temperatures down to -40°C and up to +60°C; with feed-through wiring, in AISI 316L stainless steel and with colour temperatures from 3000K to 6500K.

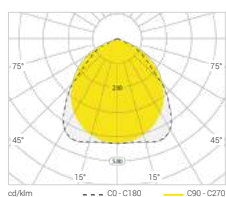
TAIS-EX series junction boxes certified for zone 1, 2, 21, 22 complete with cable glands and terminals for larger cable diameters and/or in/out solutions are available at page 20, on request.



# RINO LED-EX light fixture - Zones 2, 21, 22



690 mm 4,000 K - 50,000 h



88° symmetrical optics

Power (W)	Nominal flux (lm)Tj=25° C	Output flux (lm)Tq=25° C	Max. ambient temperature (°C)	Version	Palazzoli code
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### AISI 304 stainless steel

26	4100	3562	+55	on-off	<b>821192EX</b>
38	6133	5130			<b>821292EX</b>

### Emergency

38	4100	3562 1010 in EM	+45	on-off emergency	<b>821190EX</b>
71	6133	5130 1010 in EM		1h	<b>821290EX</b>
26	4100	3562 400 in EM	+45	on-off emergency	<b>821193EX</b>
38	6133	5130 400 in EM		3h	<b>821293EX</b>

### Painted galvanised steel

26	4100	3562	+55	on-off	<b>841192EX</b>
38	6133	5130			<b>841292EX</b>

**Equipment included:** pair of AISI 304 stainless steel eyebolts for pendant mounting.  
**Notes:** the stated flux and power values may be subject to a +/- 7% tolerance.

### THROUGH WIRING

RINO ATEX is equipped with through wiring connection

- 1 M20 cable gland in technopolymer
- 2 M20 caps in technopolymer

Terminal block spring 4 mm<sup>2</sup>, 2P+≡



1 entry on 1 side

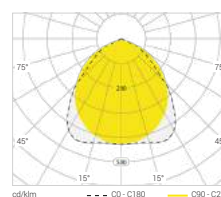


2 entries on 1 side



M20 cable gland in technopolymer

1300 mm 4,000 K - 50,000 h



88° symmetrical optics

Power (W)	Nominal flux (lm)Tj=25° C	Output flux (lm)Tq=25° C	Max. ambient temperature (°C)	Version	Palazzoli code
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### AISI 304 stainless steel

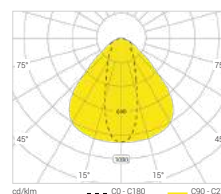
52	8200	7072	+55	on-off	<b>821392EX</b>
75	12260	10050			<b>821492EX</b>

### Emergency

52	8200	7072 1010 in EM	+45	on-off emergency	<b>821390EX</b>
75	12260	10050 1010 in EM		1h	<b>821490EX</b>
52	8200	7072 400 in EM	+45	on-off emergency	<b>821393EX</b>
75	12260	10050 400 in EM		3h	<b>821493EX</b>

### Painted galvanised steel

52	8200	7072	+55	on-off	<b>841392EX</b>
75	12260	10050			<b>841492EX</b>



Narrow beam optics 30°x90°

Power (W)	Nominal flux (lm)Tj=25° C	Output flux (lm)Tq=25° C	Max. ambient temperature (°C)	Version	Palazzoli code
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### AISI 304 stainless steel

52	8200	6500	+55	on-off	<b>820392EX</b>
75	12260	9525			<b>820492EX</b>

### Painted galvanised steel

52	8200	6500	+55	on-off	<b>840392EX</b>
75	12260	9525			<b>840492EX</b>

**Accessories** RINO LED-EX at page 61



# TIGUA-EX pendant light fixture - Zones 1, 2, 21, 22

4,000 K - 230,000 h



**7 YEARS OF WARRANTY**  
2 YEARS OPTIONALLY EXTENDABLE TO 7



## DIRECTIVES

2014/30/EU (EMC)  
2014/34/EU (ATEX)  
2011/65/EU (RoHS)  
2012/19/EU (WEEE)

## PRODUCT STANDARDS

EN 55015  
EN 60079-0  
EN 60079-18  
EN 60079-31  
EN 60079-7  
EN 60598-1  
EN 60598-2-1  
EN 60598-2-5  
EN 60598-2-22  
EN 61000-3-2  
EN 61000-3-3  
EN 61547  
EN 62311  
EN 62493  
EN 62471  
IEC/TR 62778  
EN 63000

Atex execution - Gas	II 2G - Ex eb mb IIC T4 Gb
Atex execution - Dust	II 2D - Ex tb IIIC T 85°C Db
Body material	Marine aluminium alloy (EN 44300)
Surface treatment	Fluorozirconate passivation
Surface finish	Non-toxic polyester, anti UV, kiln-polymerised coating
Colour	RAL 9005 Jet black
Diffuser material	Extra clear tempered glass
Protection rating	IP66
Impact resistance	7J (body) 4J (glass)
Corrosivity category	Equivalent to C5-M / C4-H
Mounting system	Pendant mounting
Ambient operating temperature	-35°C - +50°C (-40°C on request)
Ambient storage temperature	-40°C - +70°C
Actual efficacy of the device	Up to 115 lm/W
Colour temperature	4,000 K
Optics features	Non-ageing UV-resistant polycarbonate lenses sealed to the LED module by silicone resin
Colour rendering index according to EN 62717	CRI ≥ 80
Colour consistency	MacAdam 4-step
Photobiological risk	RGO - Exempt Group (EN 62471)
Residual flicker	< 4%
Luminous flux maintenance	L90 B10 110,000h Tq= +40°C L90 B10 230,000h Tq= +25°C
Insulation class	I
Supply voltage	110-277 Vac/110-250 Vdc: 50 W/72 W/101 W 160-277 Vac/160-250 Vdc: 144W 0/50/60Hz
Surge protection	6 kV common mode and differential mode (IEC 61000-4-5)
Power factor	≥ 0.95
Type of power supply	Spring clamps and M20 cable gland
Max. conductor cross-section	1 - 2.5 mm <sup>2</sup>
Entry cable diameter	10 - 14 mm

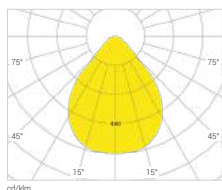
Versions with colour temperatures from 3000K to 6500K and ambient temperatures down to -40°C are also available.

TAIS-EX series junction boxes certified for zone 1, 2, 21, 22 complete with cable glands and terminals for larger cable diameters and/or in/out solutions are available at page 20, on request.



## TIGUA-EX pendant light fixture - Zones 1, 2, 21, 22

4,000 K - 230,000 h



Symmetrical 81° extra wide beam optics

Power (W)	Nominal flux (lm) <sub>Tj=25 °C</sub>	Output flux (lm) <sub>Tq=25 °C</sub>	Max. ambient temperature (°C)	Version	Palazzoli code
50	6980	5808	+50	DALI	<b>817031EX</b>
72	9950	8280	+40		<b>817032EX</b>
101	13950	11615	+50		<b>817033EX</b>
144	19850	16560	+40		<b>817034EX</b>

**Equipment included:** double chain bracket and busbar.

**Notes:** recommended installation height: between 4 m and 7 m.  
The stated flux and power values may be subject to a +/- 7% tolerance.

## Accessories TIGUA-EX



0 - 90° adjustable connection for catenary wire installation

Manufacturing material	Palazzoli code
galvanised steel	<b>811921</b>



Swivelling connection 0 - 90° for double chain and busbar installation

Manufacturing material	Palazzoli code
galvanised steel	<b>811919</b>



Kit with bracket for ceiling installation

Manufacturing material	Palazzoli code
galvanised steel	<b>811916</b>



Set of brackets for installation with 60 mm Ø pole

Manufacturing material	Palazzoli code
galvanised steel	<b>811920</b>

**Accessories** junction boxes  
TAIS-EX at page 20  
on request





# XTIGUA-EX pendant light fixtures - Zone 1, 2, 21, 22

4,000 K - 230,000 h



7

## YEARS OF WARRANTY

2 YEARS OPTIONALLY EXTENDABLE TO 7



## DIRECTIVES

2014/30/EU (EMC)  
2014/34/EU (ATEX)  
2011/65/EU (RoHS)  
2012/19/EU (WEEE)

## PRODUCT STANDARDS

EN 55015  
EN 60079-0  
EN 60079-18  
EN 60079-31  
EN 60079-7  
EN 60598-1  
EN 60598-2-1  
EN 60598-2-5  
EN 60598-2-22  
EN 61000-3-2  
EN 61000-3-3  
EN 61547  
EN 62311  
EN 62493  
EN 62471  
IEC/TR 62778  
EN 63000

Atex execution - Gas	II 2G - Ex eb mb IIC T4 Gb
Atex execution - Dust	II 2D - Ex tb IIIC T 85°C Db
Body material	Marine aluminium alloy (EN 44300)
Surface treatment	Fluorozirconate passivation
Surface finish	Non-toxic polyester, anti UV, kiln-polymerised coating
Colour	RAL 9005 Jet black
Diffuser material	Extra clear tempered glass
Protection rating	IP66
Impact resistance	7J (body) 4J (glass)
Corrosivity category	Equivalent to C5-M / C4-H
Mounting system	Pendant mounting
Ambient operating temperature	-35°C - +50°C (-40°C on request)
Ambient storage temperature	-40°C - +70°C
Actual efficacy of the device	Up to 115 lm/W
Colour temperature	4,000 K
Optics features	Non-ageing UV-resistant polycarbonate lenses sealed to the LED module by silicone resin
Colour rendering index according to EN 62717	CRI ≥ 80
Colour consistency	MacAdam 4-step
Photobiological risk	RGO - Exempt Group (EN 62471)
Residual flicker	< 4%
Luminous flux maintenance	L90 B10 110,000h Tq= +40°C L90 B10 230,000h Tq= +25°C
Insulation class	I
Supply voltage	160-277 Vac/160-250 Vdc 0/50/60Hz
Surge protection	6 kV common mode and differential mode (IEC 61000-4-5)
Power factor	≥ 0.95
Type of power supply	Spring clamps and M20 cable gland
Max. conductor cross-section	1 - 2.5 mm <sup>2</sup>
Entry cable diameter	10 - 14 mm

Versions with colour temperatures from 3000K to 6500K and ambient temperatures down to -40°C are also available.

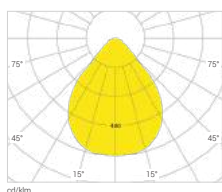
TAIS-EX series junction boxes certified for zone 1, 2, 21, 22 complete with cable glands and terminals for larger cable diameters and/or in/out solutions are available at page 20, on request.





## XTIGUA-EX pendant light fixtures - Zone 1, 2, 21, 22

4,000 K - 230,000 h



Symmetrical 81° extra wide beam optics

Power (W)	Nominal flux (lm) <sub>Tj=25 °C</sub>	Output flux (lm) <sub>Tq=25 °C</sub>	Max. ambient temperature (°C)	Version	Palazzoli code
151	20900	17365	+45	DALI	<b>818031EX</b>
216	29800	24840	+40		<b>818032EX</b>
201	27800	23115	+35		<b>818033EX</b>
288	39800	33120	+30		<b>818034EX</b>

**Equipment included:** double chain bracket and busbar.

**Notes:** recommended installation height: between 9 m and 15 m.  
The stated flux and power values may be subject to a +/- 7% tolerance.



Adjustable connection 0 - 90°  
for double chain installation

Manufacturing material	Palazzoli code
galvanised steel	<b>819994</b>

# XTIGUA-EX

illuminates the Marcegaglia factory in Ravenna in Italy





# META<sub>150</sub>-EX pendant light fixture - Zones 2, 21, 22

4,000 K - 230,000 h



7

## YEARS OF WARRANTY

2 YEARS OPTIONALLY EXTENDABLE TO 7



## DIRECTIVES

2014/30/EU (EMC)  
2014/34/EU (ATEX)  
2011/65/EU (RoHS)  
2012/19/EU (WEEE)

## PRODUCT STANDARDS

EN 55015  
EN 60079-0  
EN 60079-18  
EN 60079-31  
EN 60079-7  
EN 60598-1  
EN 60598-2-1  
EN 60598-2-5  
EN 60598-2-22  
EN 61000-3-2  
EN 61000-3-3  
EN 61547  
EN 62311  
EN 62493  
EN 62471  
IEC/TR 62778  
EN 63000

Atex execution - Gas	II 3G - Ex ec mc IIC T5 Gc
Atex execution - Dust	II 2D - Ex tb IIIC T 85°C Db
Body material	Aluminium alloy (EN 46100)
Surface treatment	Fluorozirconate passivation
Surface finish	Non-toxic polyester, anti UV, kiln-polymerised coating
Colour	RAL 9005 Jet black
Diffuser material	Extra clear tempered glass
Protection rating	IP66
Impact resistance	7J (body) 4J (glass)
Corrosivity category	Equivalent to C4-M / C3-H
Mounting system	Pendant mounting
Ambient operating temperature	-35°C - +40°C (-40°C - +50°C on request)
Ambient storage temperature	-40°C - +70°C
Actual efficacy of the device	Up to 148 lm/W
Colour temperature	4,000 K
Optics features	Non-aging UV-resistant polycarbonate lenses with > 90% efficiency and > 95% transparency
Colour rendering index according to EN 62717	CRI ≥ 80
Colour consistency	MacAdam 3-step
Photobiological risk	RGO - Exempt Group (EN 62471)
Residual flicker	< 4%
Luminous flux maintenance	L90 B10 110,000h Tq= +40°C L90 B10 230,000h Tq= +25°C
Insulation class	I
Supply voltage	220 V-240 V 60 W 110-277 Vac/110-250 Vdc: 97W 160-277 Vac/160-250 Vdc: 112 W/134 W 0/50/60Hz
Surge protection	6 kV common mode and differential mode (IEC 61000-4-5)
Power factor	≥ 0.95
Type of power supply	Spring clamps and M20 cable gland
Max. conductor cross-section	1 - 2.5 mm <sup>2</sup>
Entry cable diameter	10 - 14 mm

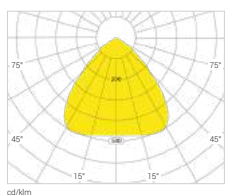
Versions with colour temperatures from 3000K to 6500K and ambient temperatures up to +50 °C are also available.

TAIS-EX series junction boxes certified for zone 1, 2, 21, 22 complete with cable glands and terminals for larger cable diameters and/or in/out solutions are available at page 20, on request.



## META<sub>150</sub>-EX pendant light fixture - Zones 2, 21, 22

4,000 K - 230,000 h



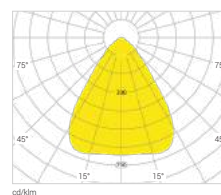
Extra wide beam optics, comfort 90°

Power (W)	Nominal flux (lm)Tj=25° C	Output flux (lm)Tq=25° C	Max. ambient temperature (°C)	Version	Palazzoli code
60	10296	8748	+50	on-off	<b>810430EX</b>
97	17227	14356			<b>810440EX</b>
112	20300	16576	+40	DALI	<b>810450EX</b>
134	24200	19832			<b>810460EX</b>

**Equipment included:** quick connection for pendant mounting.

**Notes:** recommended installation height: between 5 m and 8 m.

The stated flux and power values may be subject to a +/- 7% tolerance.



75° medium beam optics

Power (W)	Nominal flux (lm)Tj=25° C	Output flux (lm)Tq=25° C	Max. ambient temperature (°C)	Version	Palazzoli code
60	10296	8580	+50	on-off	<b>810431EX</b>
97	17227	14065			<b>810441EX</b>
112	20300	16352	+40	DALI	<b>810451EX</b>
134	24200	19564			<b>810461EX</b>

**Equipment included:** quick connection for pendant mounting.

**Notes:** recommended installation height: between 5 m and 8 m.

The stated flux and power values may be subject to a +/- 7% tolerance.

## Accessories META<sub>150</sub>-EX



Adjustable bracket for wall installation poles and light towers

Manufacturing material	Palazzoli code
galvanised steel	<b>810999</b>



Catenary wire installation bracket 0-90° adjustable

Manufacturing material	Palazzoli code
galvanised steel	<b>810994</b>



0-90° swivelling attachment for double chain and busbar installation

Manufacturing material	Palazzoli code
galvanised steel	<b>810996</b>



Bracket for double chain and busbar installation

Manufacturing material	Palazzoli code
galvanised steel	<b>810997</b>



Bracket for ceiling installation

Manufacturing material	Palazzoli code
galvanised steel	<b>810998</b>



Bracket for installation with Ø 60 mm pole

Manufacturing material	Palazzoli code
galvanised steel	<b>810995</b>

**Accessories** junction boxes  
TAIS-EX at page 20  
on request





## RINO-EX fluorescent - Zones 1, 2, 21, 22



Atex execution - Gas	II 2G - Ex e mb IIC T4 Gb
Atex execution - Dust	II 2D - Ex tb IIIC T 70°C Db
Body material	AISI 304 stainless steel
Surface treatment	Natural finish
Diffuser material	Extra clear tempered glass
Protection rating	IP66
Impact resistance	7J (body) 4J (glass)
Corrosivity category	Equivalent to C5-H
Mounting system	Provided with 2 M8 threaded holes
Ambient operating temperature	-40°C - +55°C
Ambient storage temperature	-40°C - +70°C
Lamp holder type	G13 T8 preventing the unhooking
Insulation class	I
Supply voltage	110V - 230V - 240V 0/50/60Hz
Power factor	> 0.97
Type of power supply	Spring clamps and M20 cable gland
Max. conductor cross-section	1 - 2.5 mm <sup>2</sup>
Entry cable diameter	10 - 14 mm



### DIRECTIVES

2014/30/EU (EMC)  
2014/34/EU (ATEX)  
2011/65/EU (RoHS)  
2012/19/EU (WEEE)

### PRODUCT STANDARDS

EN 55015  
EN 60079-0  
EN 60079-18  
EN 60079-31  
EN 60079-7  
EN 60598-1  
EN 60598-2-1  
EN 61000-3-2  
EN 61000-3-3  
EN 61547  
EN 62311  
EN 62493  
EN 63000



## RINO-EX fluorescent - Zones 1, 2, 21, 22



Light fixtures  
in AISI 304 stainless steel

Length (mm)	Power (W)	Tube type	Max. ambient temperature (°C)	Reflector	Version	Palazzoli code
690	1x18	T8	+55	white	on-off	<b>822181EX</b>
	2x18					<b>822182EX</b>
1300	1x36					<b>822281EX</b>
	2x36					<b>822282EX</b>

**Features:** fluorescent tubes are not included.  
Light fixture predisposed with 2+1 M20 holes for in-out connection.  
2 M8 threaded holes for fixing the accessories.

## Accessories RINO-EX fluorescent



Pair of adjustable supports  
for wall or ceiling installation

Manufacturing material	Palazzoli code
AISI 304 stainless steel	<b>820010</b>



Pairs of "V" supports  
for ceiling installation

Manufacturing material	Palazzoli code
AISI 304 stainless steel	<b>820017</b>



Pairs of hooks  
for pendant mounting

Manufacturing material	Palazzoli code
AISI 304 stainless steel	<b>820011</b>



Pendant mounting  
and ceiling adaptation kit

Manufacturing material	Palazzoli code
AISI 304 stainless steel	<b>820018</b>

**Notes:** in the case of relamping, the adapter kit enables to adjust the fixing distances of the light fixture to those already present in the system.



Pair of collars  
for mounting steel light fixtures  
on tube

Manufacturing material	Palazzoli code
AISI 304 stainless steel	<b>820016</b>



Quick fastening kit  
for ceiling mounting

Manufacturing material	Palazzoli code
AISI 304 stainless steel	<b>820019</b>



## RINO-EX fluorescent - Zones 2, 21, 22



Atex execution - Gas	II 3G - Ex nA IIC T4 Gc
Atex execution - Dust	II 2D - Ex tb IIIC T 85°C Db
Body material	AISI 304 stainless steel
Surface treatment	Natural finish
Diffuser material	Extra clear tempered glass
Protection rating	IP66
Impact resistance	7J (body) 4J (glass)
Corrosivity category	Equivalent to C5-H
Mounting system	Pair of AISI 304 stainless steel hooks
Ambient operating temperature	-20°C - +40°C (2 tubes) -20°C - +50°C (1 tube)
Ambient storage temperature	-40°C - +70°C
Lamp holder type	G13 T8
Insulation class	I
Rated voltage	230V 50/60Hz
Power factor	> 0.90
Type of power supply	Spring clamps and M20 cable gland
Max. conductor cross-section	2.5 mm <sup>2</sup>
Entry cable diameter	10 - 14 mm



### DIRECTIVES

2014/30/EU (EMC)  
2014/34/EU (ATEX)  
2011/65/EU (RoHS)  
2012/19/EU (WEEE)

### PRODUCT STANDARDS

EN 55015  
EN 60079-0  
EN 60079-15  
EN 60079-31  
EN 60079-7  
EN 60598-1  
EN 60598-2-1  
EN 61000-3-2  
EN 61000-3-3  
EN 61547  
EN 62311  
EN 62493  
EN 63000



## RINO-EX fluorescent - Zones 2, 21, 22



Light fixtures  
in AISI 304 stainless steel

Length (mm)	Power (W)	Tube type	Max. ambient temperature (°C)	Reflector	Version	Palazzoli code
690	1x18	T8	+50	white	on-off	<b>822131EX</b>
	2x18		+40			<b>822132EX</b>
1300	1x36		+50			<b>822231EX</b>
	2x36		+40			<b>822232EX</b>

**Equipment included:** pair of hooks in AISI 304 steel for pendant mounting code 820001.

**Features:** fluorescent tubes are not included.

## Accessories RINO-EX fluorescent



Pairs of hooks  
for pendant mounting

Manufacturing material	Palazzoli code
AISI 304 stainless steel	<b>820001</b>



Pair of adjustable supports  
for wall and ceiling installation

Manufacturing material	Palazzoli code
AISI 304 stainless steel	<b>820000</b>



Pair of collars  
for installation on pipe

Manufacturing material	Palazzoli code
AISI 304 stainless steel	<b>820006</b>

**Accessories** junction boxes  
TAIS-EX at page 20  
on request





## RINO-EX E27 - Zone 22



Atex execution - Dust	II 3D - Ex tc IIIC T 75°C Dc
Body material	Aluminium alloy
Surface treatment	Fluorozirconate passivation
Surface finish	Non-toxic polyester, anti UV, kiln-polymerised coating
Colour	RAL 7035 Light grey (body) RAL 2011 Deep orange (cage)
Diffuser material	Prismatic tempered glass
Protection rating	IP65
Impact resistance	7J (body) 4J (glass)
Corrosivity category	Equivalent to C4-M / C3-H
Mounting system	Ready for wall installation
Ambient operating temperature	-20°C - +40°C
Ambient storage temperature	-40°C - +70°C
Lamp holder type	E27 porcelain
Insulation class	I
Rated voltage	230V 50/60Hz
Power factor	> 0.90
Type of power supply	Spring clamps and M20 cable gland
Max. conductor cross-section	2.5 mm <sup>2</sup>
Entry cable diameter	10 - 14 mm



### DIRECTIVES

2014/34/EU (ATEX)  
2011/65/EU (RoHS)  
2012/19/EU (WEEE)

### PRODUCT STANDARDS

EN 60079-0  
EN 60079-31  
EN 60598-1  
EN 60598-2-1  
EN 63000





## RINO-EX E27 - Zone 22



Oval light fixtures  
in aluminium alloy

Power (W)	Dimensions (W)	Lamp holder type	Max. ambient temperature (°C)	No. of entries	Version	Palazzoli code
18	119x112					<b>831072EX</b>
28	226x130	E27	+40	1	with steel cage	<b>831172EX</b>
53	295x170					<b>831272EX</b>

**Equipment included:** internal and external earth screw and cable gland.



Round light fixture  
in aluminium alloy

Power (W)	Dimensions (W)	Lamp holder type	Max. ambient temperature (°C)	No. of entries	Version	Palazzoli code
28	200x182	E27	+40	1	with steel cage	<b>830072EX</b>

**Equipment included:** internal and external earth screw and cable gland.

# RINO-EX


illuminates the technical premises of Esselunga in Milan





## MARKING

CE marking is mandatory and must be affixed to any equipment, assembly or protection system (excluding components) before it is placed on the market or put into service. The manufacturer affixes the CE marking on the product that complies with the directive, in accordance with the following indications:

**CE EU mark + identification number of the Notified Body responsible  
for supervision +  + Group + Category**

For example: **CE0051  II 2GD**

As regards Category 3, as no intervention of a notified body is envisaged and therefore no CE type testing is required, nor production supervision, the marking will be as follows:

**CE EU mark +  + Group + Category**

For example: **CE  II 3G**


The purpose of marking is to inform those that purchase, install, use, maintain, check, etc., that the device has been constructed in compliance with the essential safety requirements, to the level established by the category.

In order to install equipment (whether electrical or not) in a potentially explosive area, it is necessary and sufficient that it is marked as above.

This means that electrical and non-electrical products which do not comply with the harmonised standards (e.g. Ex constructions) may be installed while still compliant with the law and with explosion protection principles.

In this case the equipment will be marked as shown in the examples above.

If, on the other hand, equipment (e.g. electrical equipment) is installed that is compliant with the directive as a consequence of the conformity with harmonised standards, i.e. Ex electrical equipment that are consequently presumed to comply with the Essential Safety Requirements, the ATEX marking requirements must be affixed in accordance with the following indications:


**EU mark CE+ identification number of the Notified  
Body responsible for supervision +  + Group + Category + Ex mark**

Example 1: **CE0051  II 2G Ex de IIC T5 Gb**

Example 2: **CE0051  II 2D Ex tb IIIC T 100°C Db IP66**

Example 3: **CE  II 3G Ex nR IIC T6 Gc**

A complete marking of an Ex electrical equipment, in conformity with directive 94/9/EC, must show the following:

ABCD SpA, Via Moro 2, Milan (manufacturer's name and address)  
MRT - 1234 - 2004 (type, serial or batch number, year)  
CE0051 (CE mark, identification number of the Notified Body responsible for manufacturing supervision)  
 II 2G (group, category)  
Ex d IIB T4 Gb (protection method, gas group, EPL temperature class)  
CESI 02 ATEX 0999 (CE type test certificate number)  
Characteristic parameters (supply voltage, frequency, etc.)



# GENERAL TERMS AND CONDITIONS OF SALE AND SUPPLY



To view the terms and conditions of the contracts scan the QR code.



## CONDITIONS OF SALE

**GENERAL CONDITIONS OF SALE AND SUPPLY**  
Validity Ref. of Rev. 01/2020 from 20 July 2020

### 1. INTRODUCTION

Unless specifically waived in writing, these General Conditions of Sale and Supply (hereinafter "General Conditions") constitute an integral part of all sale and supply contracts entered into by Palazzoli S.p.A. (hereinafter "Palazzoli" or the "Company") and the Customer is considered to have accepted them through the Order Confirmation. All Palazzoli offers, order confirmations, deliveries and invoices are governed by these General Conditions, unless explicitly and specifically waived by Palazzoli in writing. The Customer is considered to have accepted these General Conditions even if they differ from any general or specific purchase conditions issued by the Customer itself, which shall in no way be binding on Palazzoli, unless the latter has specifically approved them in writing.

The General Conditions are published on the Palazzoli website ([www.palazzoli.com](http://www.palazzoli.com)) and can be consulted and printed by Customers at any time.

Through the Order Confirmation, Customer declares to have viewed and fully accepted the contents of these General Conditions.

Palazzoli may update, supplement and/or amend these Conditions at any time, giving written notice of any such changes on its website ([www.palazzoli.com](http://www.palazzoli.com)). Any such updates, amendments and/or supplements shall apply to supply and sale. Orders received by Palazzoli on dates after that on which they were published on the website.

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[www.palazzoli.com](http://www.palazzoli.com)  
Single-member company subject  
to coordination by LMH S.r.l.

**Palazzoli**

Tax code 04452750484  
VAT 03316260177  
Brescia Chamber of Commerce REA no. 356562  
Brescia Register of Companies no. 04452750484  
Mechanised processing code BS 058237  
Share Capital 5,096,000 Euro fully paid-up  
IQNET ISO 9001:2008



Ambassadors of Made in Italy

Customer focused operations

Smart engineering

Top Manufacture

Service excellence



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**Palazzoli**  
SISTEMI ELETTRICI E LUCE D'AUTORE